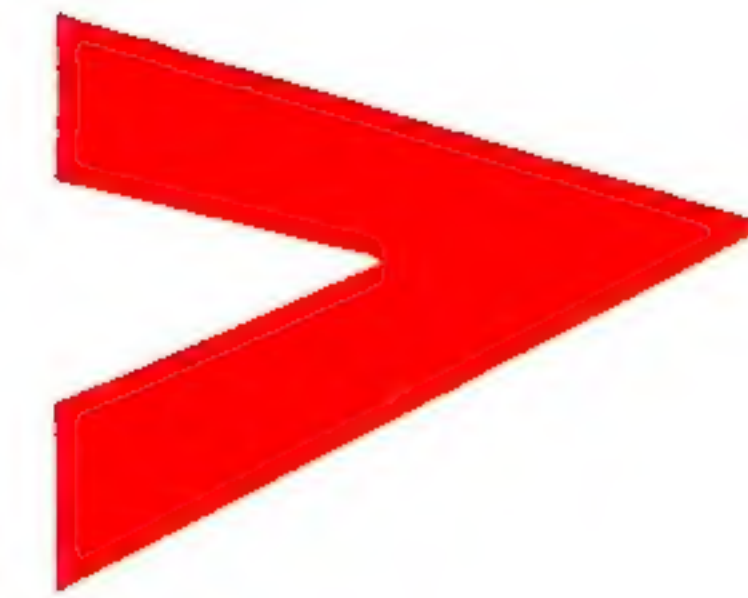


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(*Missile Market Guide and Directory released mid-April is Vol. 3, No. 5)

(*Missiles and Rockets was published weekly beginning July 7, 1958)

1958 - Volume 4, No. 1-26 (July 7, 1958-Dec. 29, 1958)

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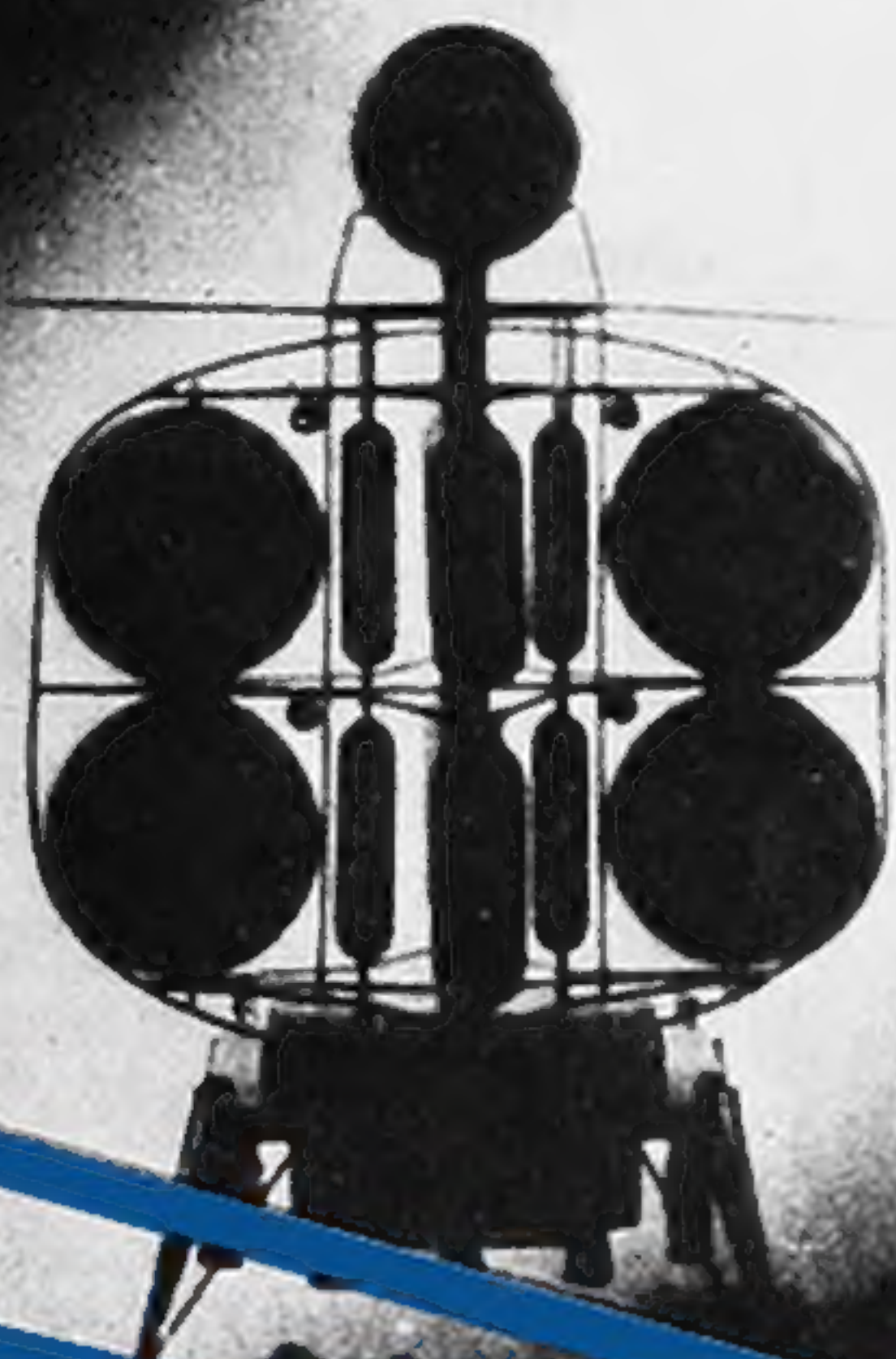
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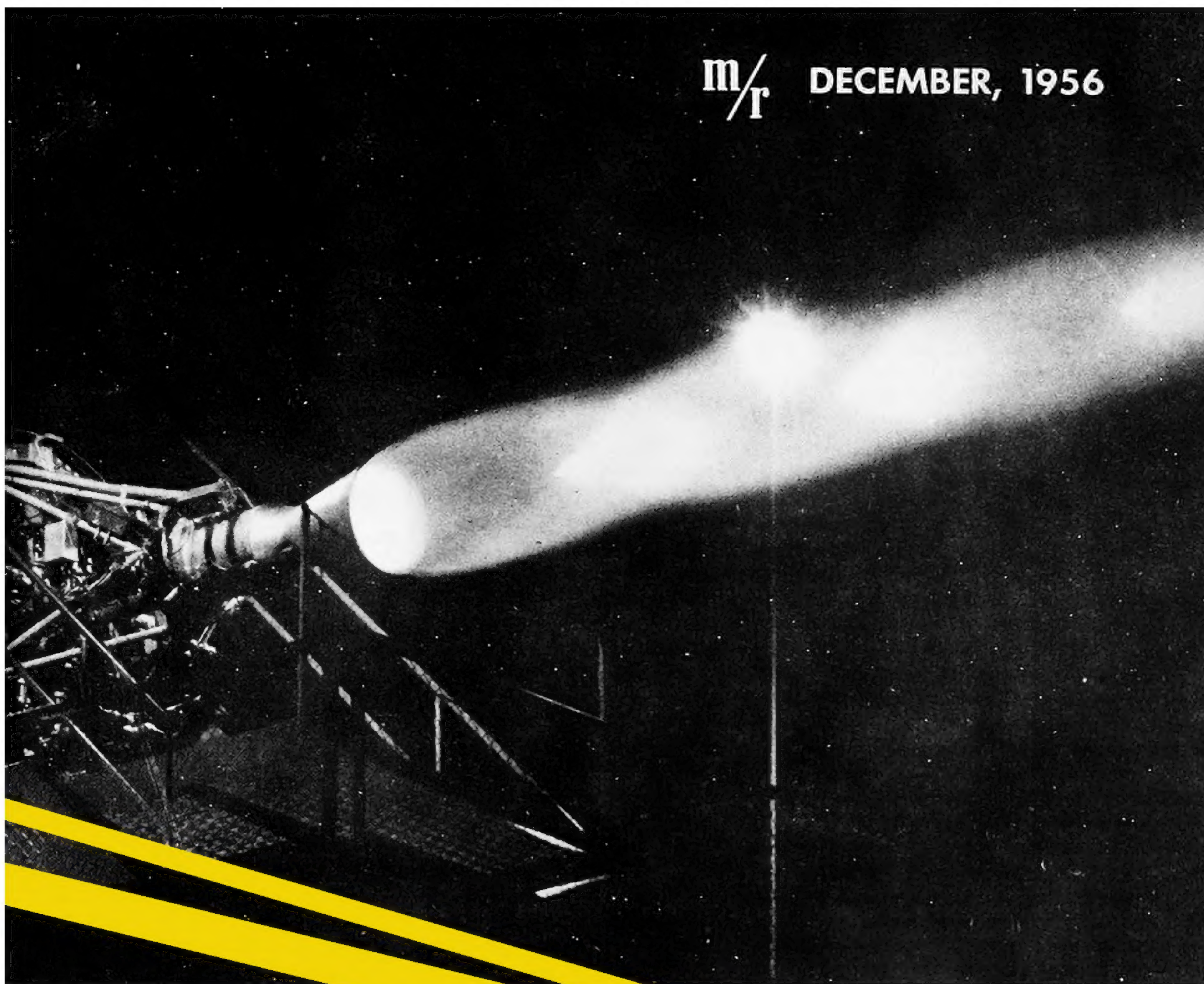
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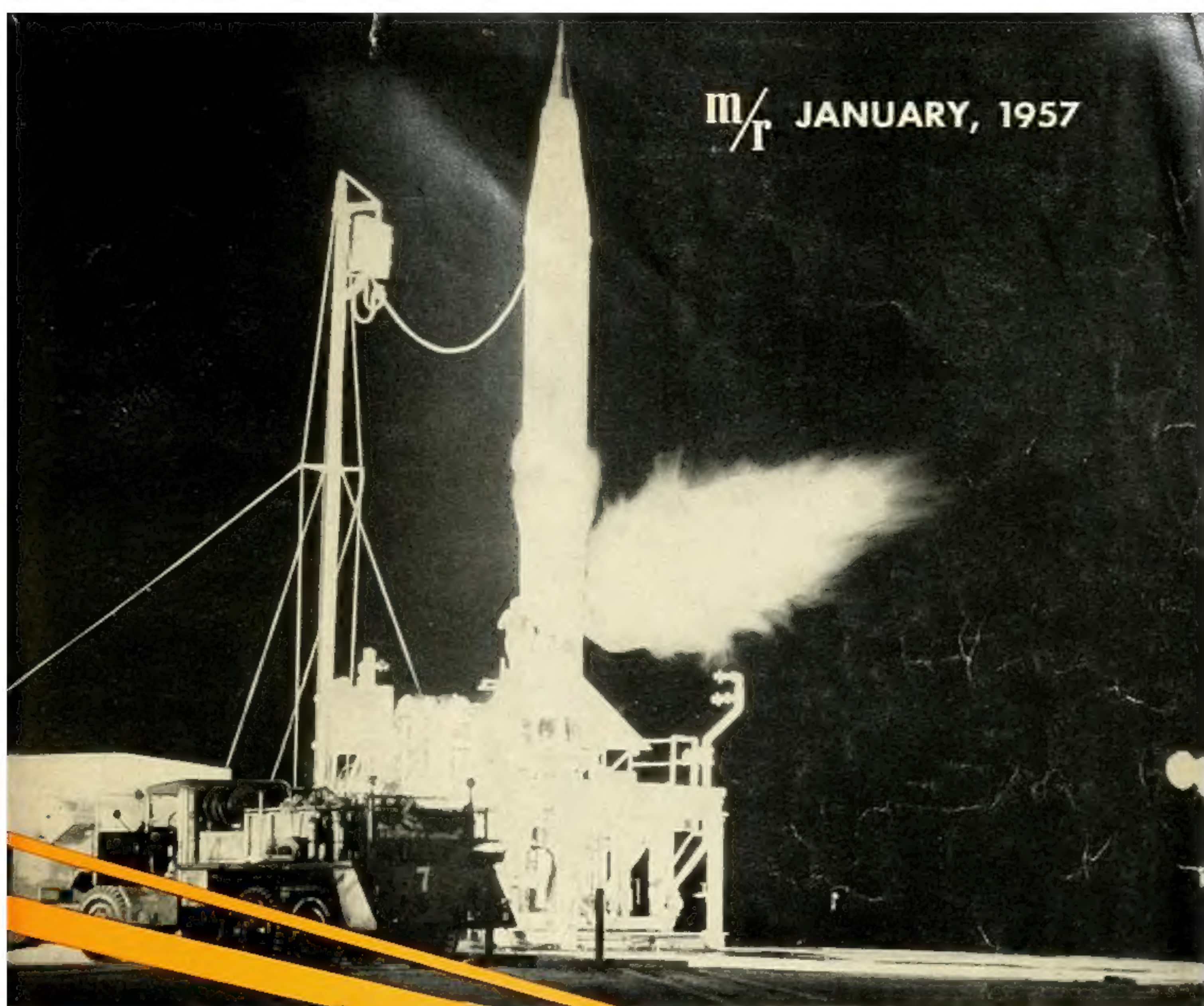


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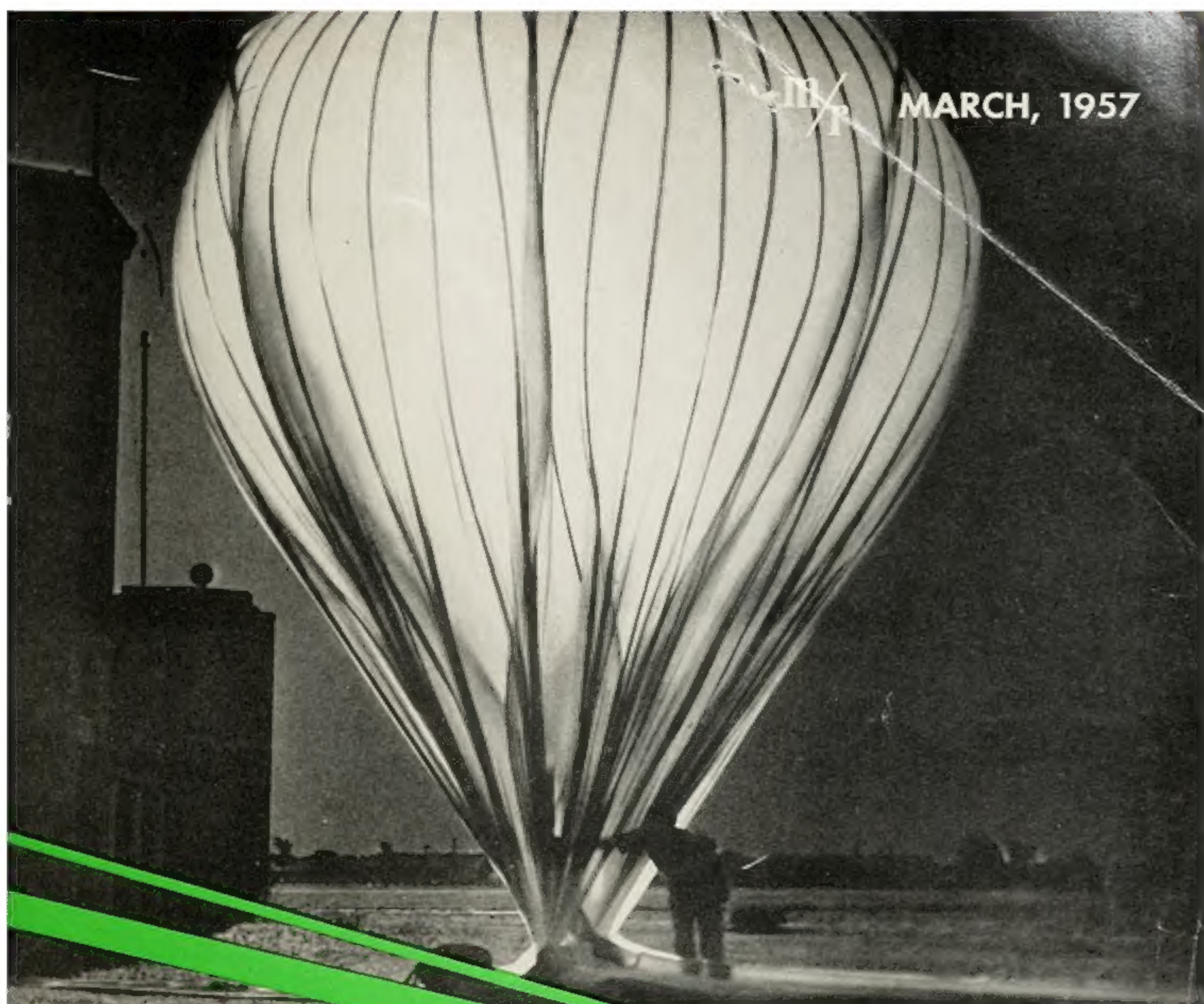
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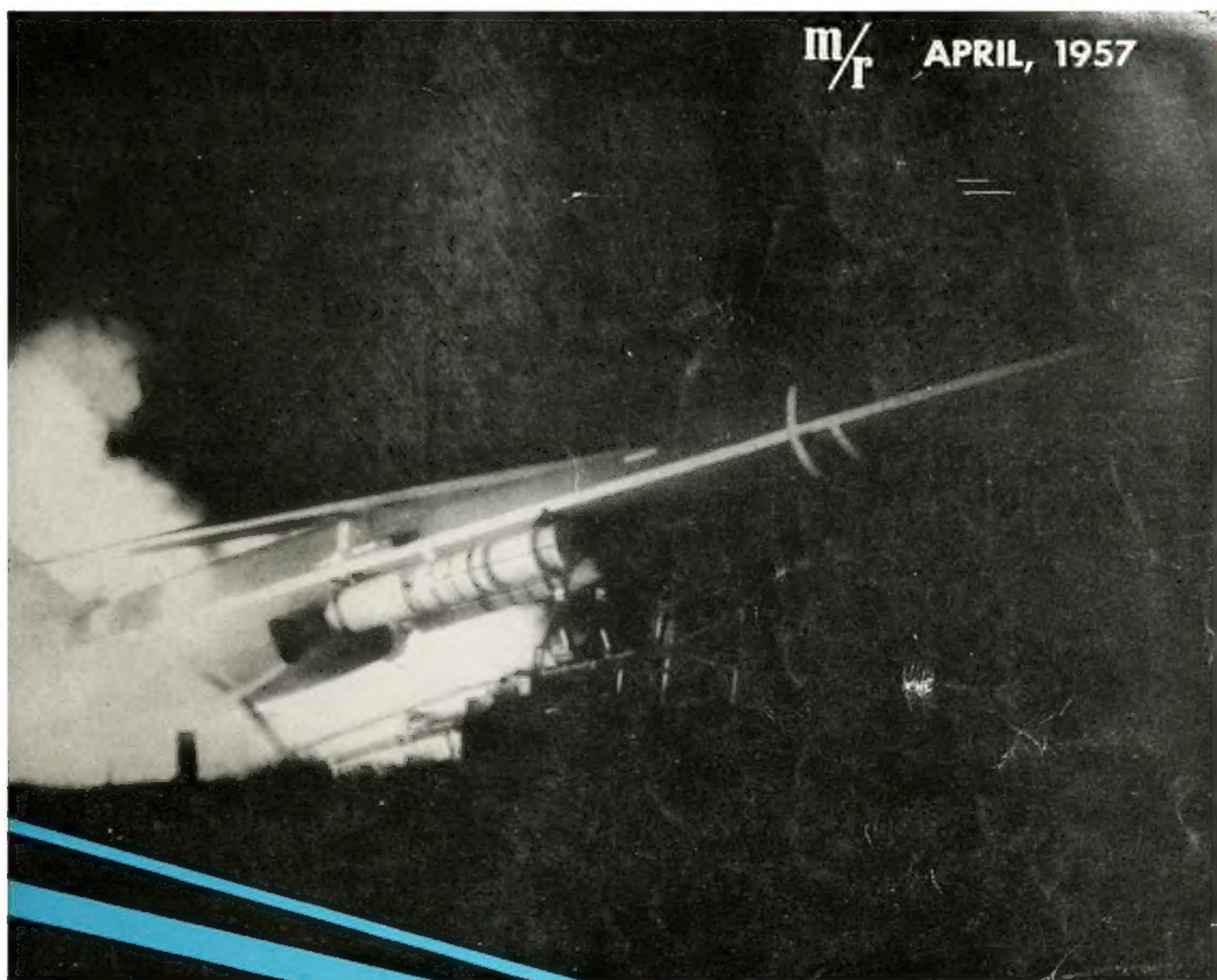
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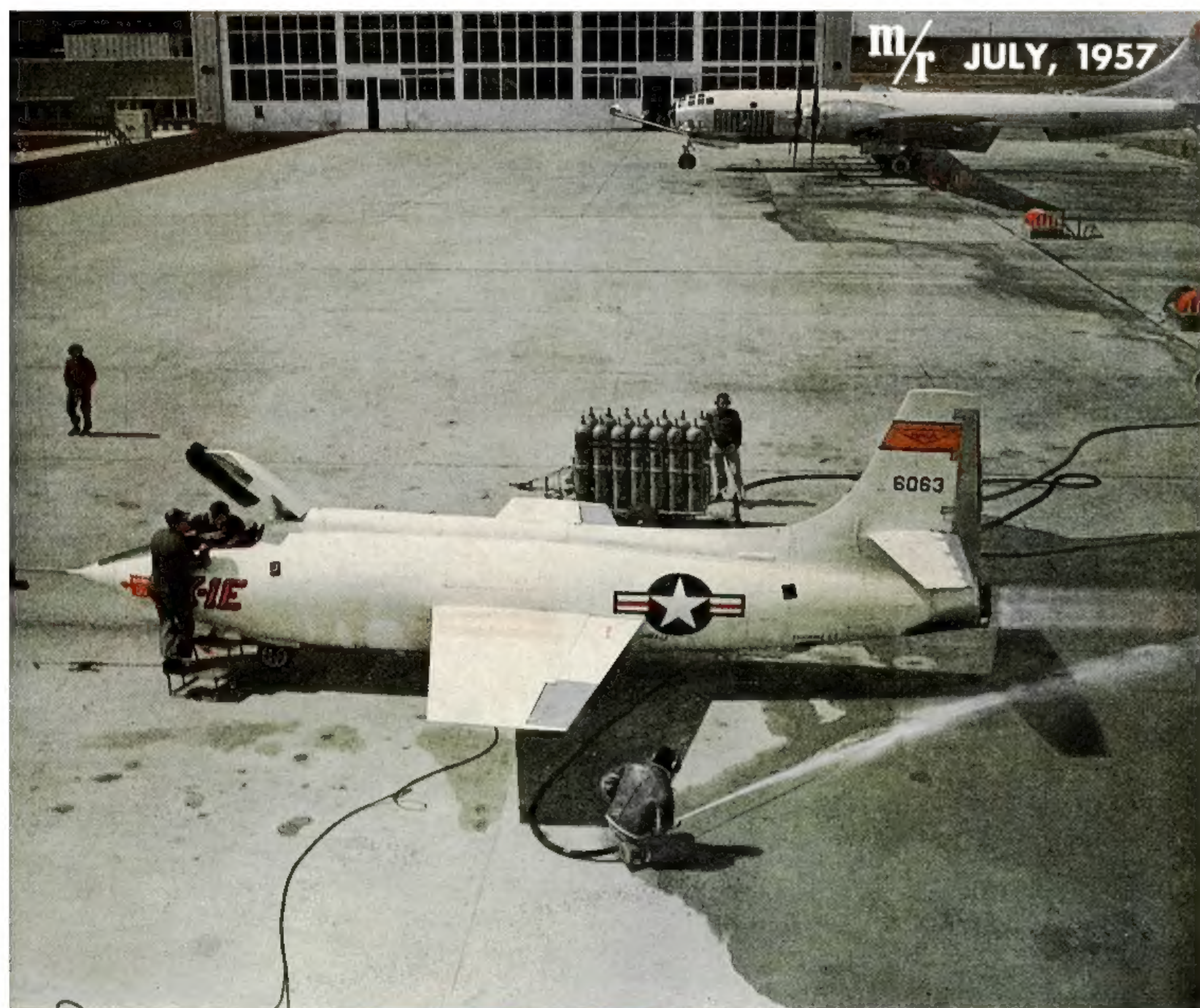
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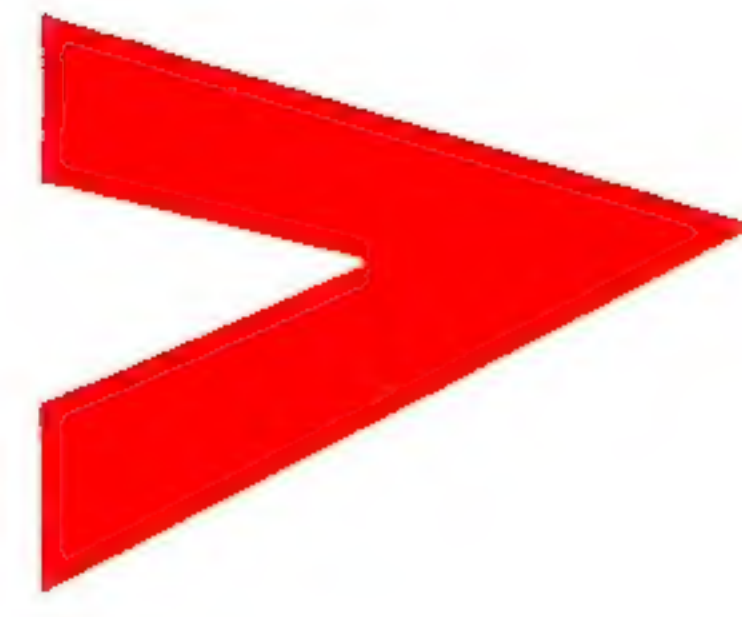
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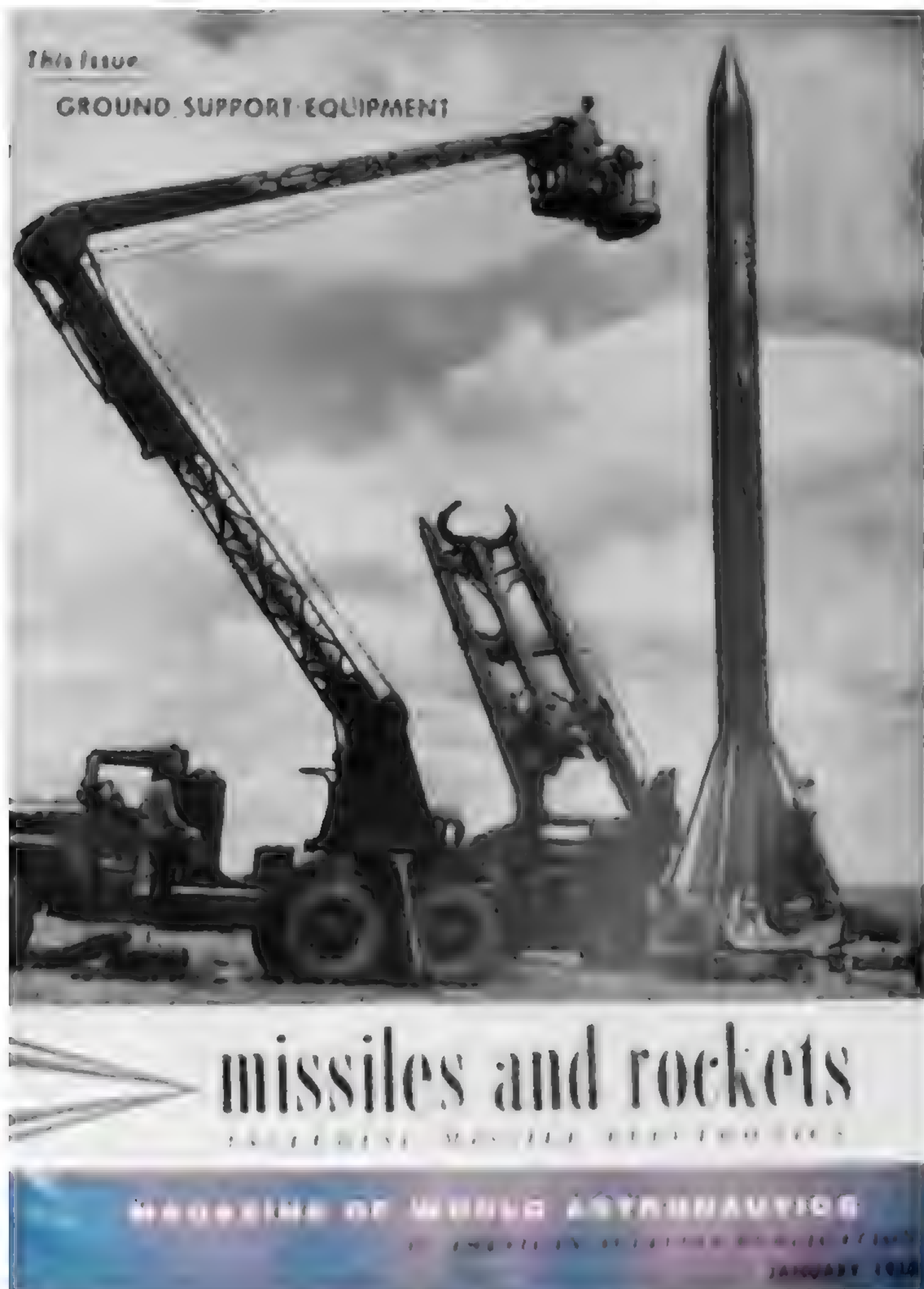
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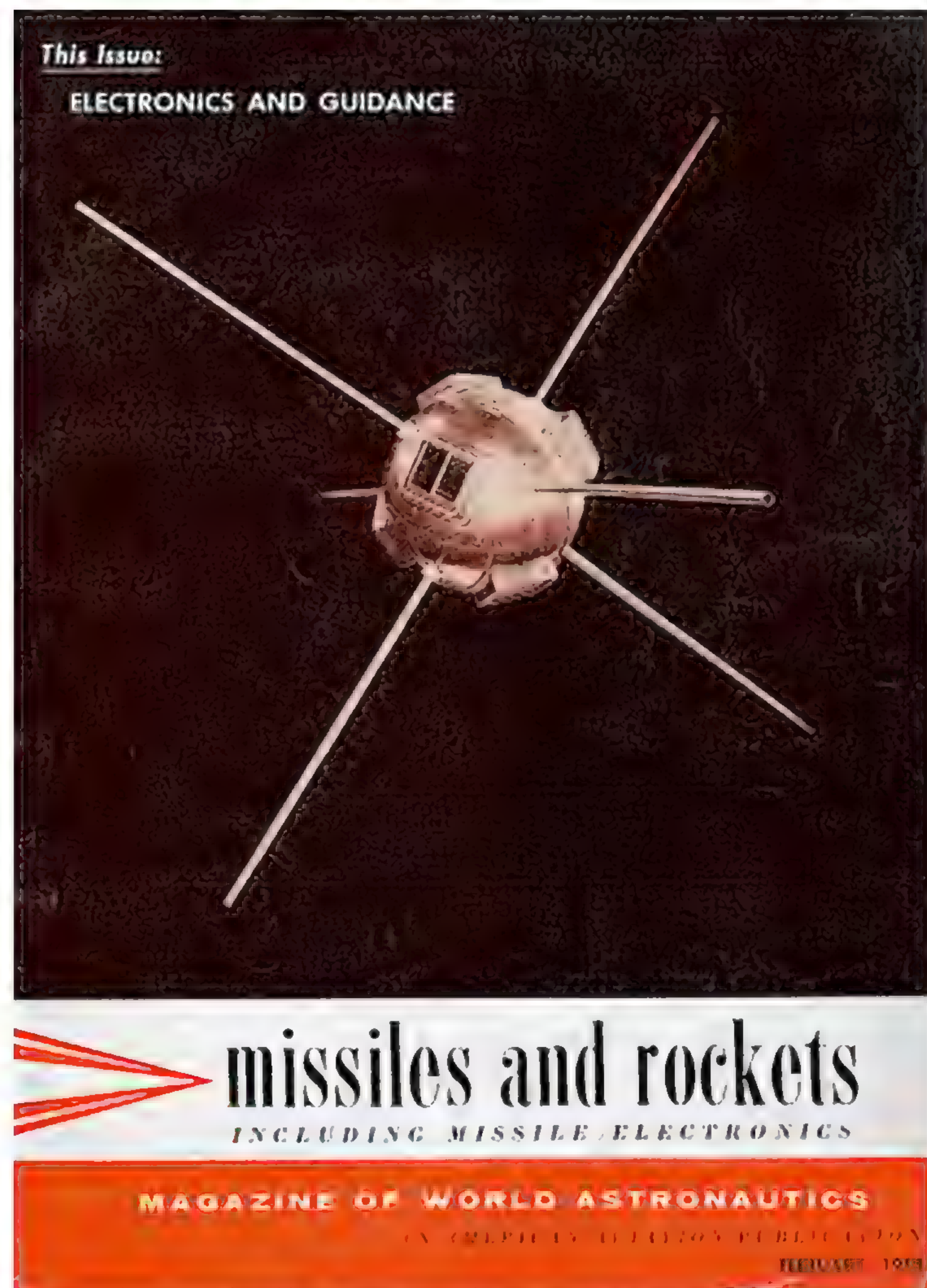
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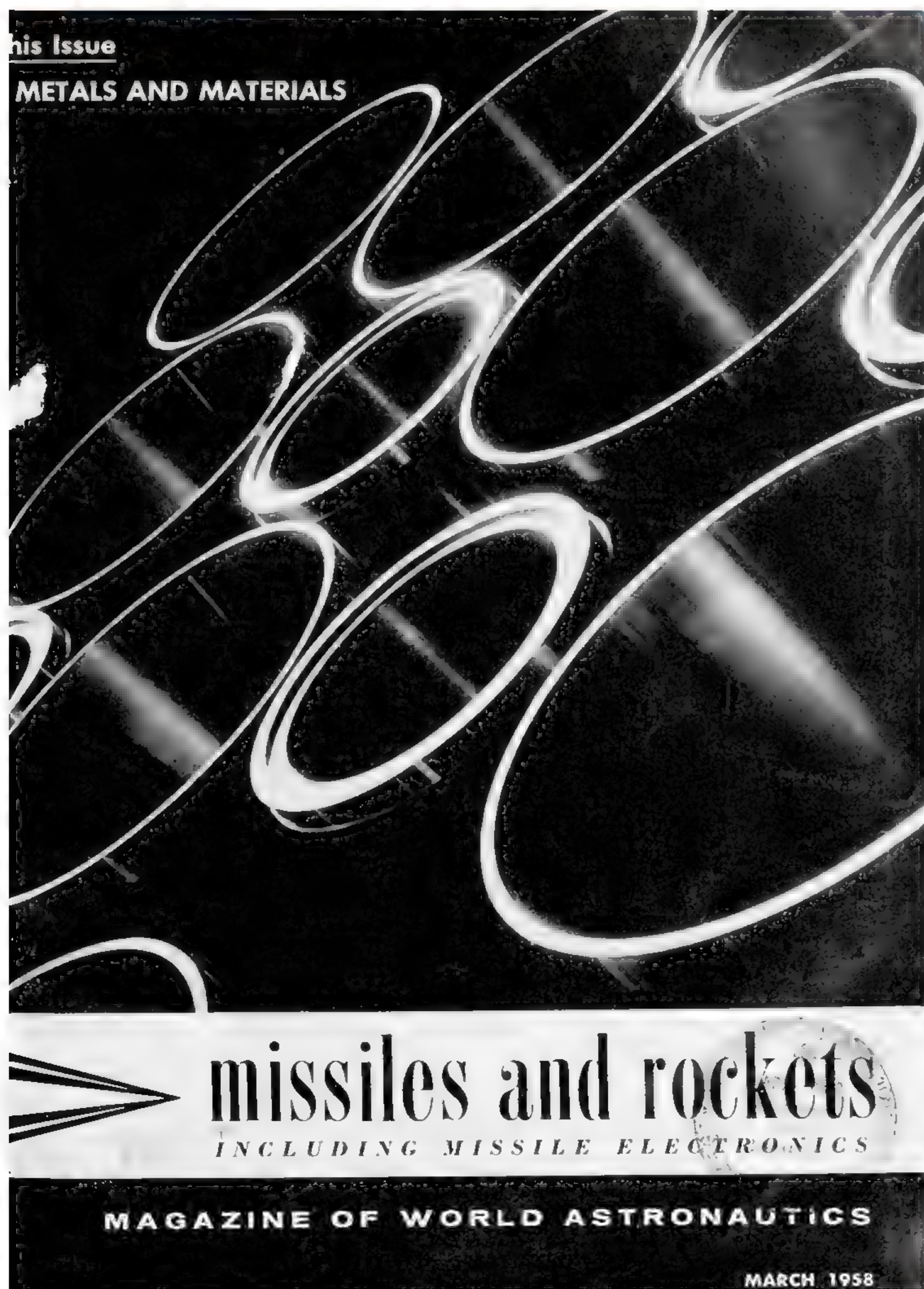
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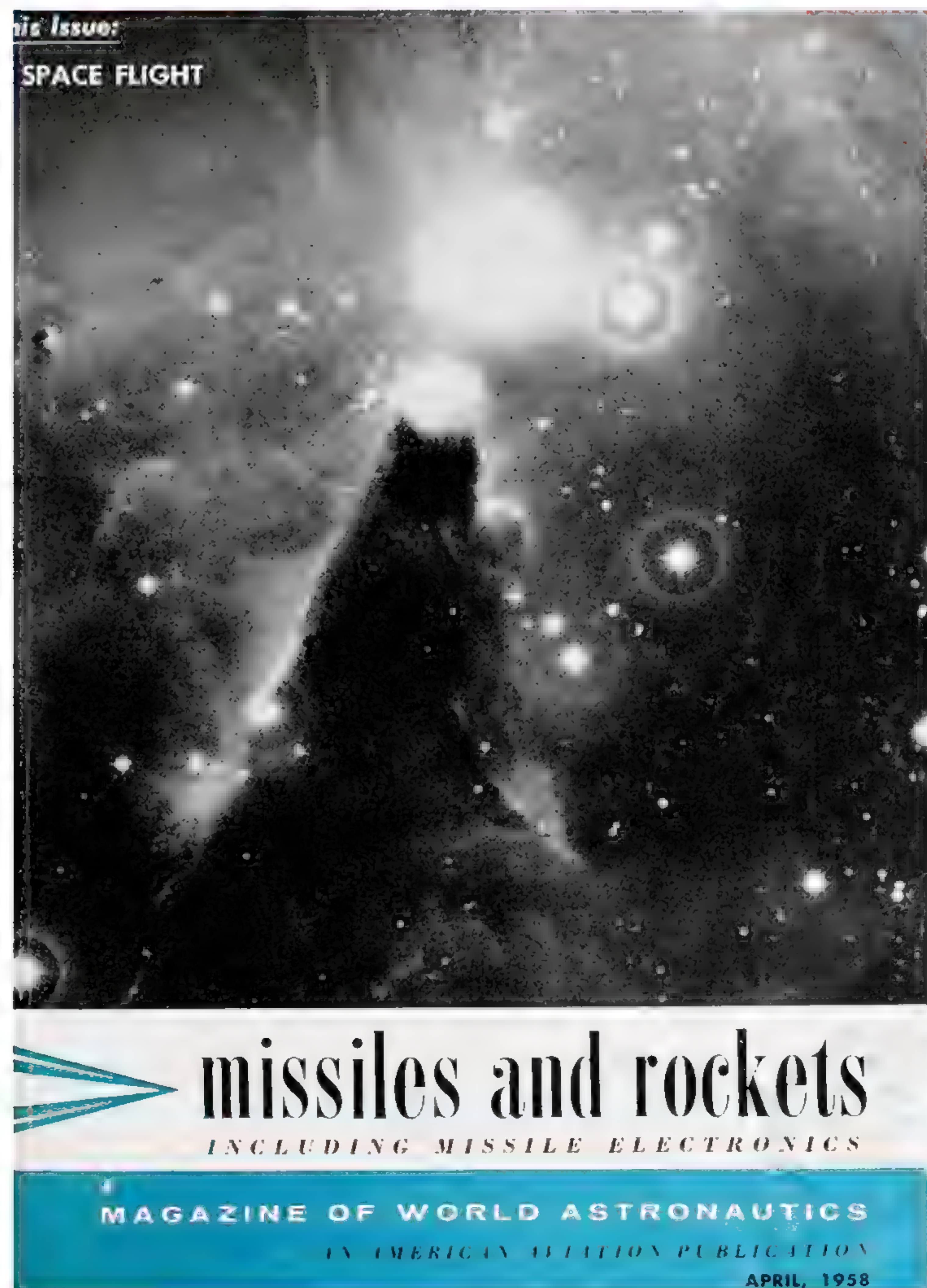
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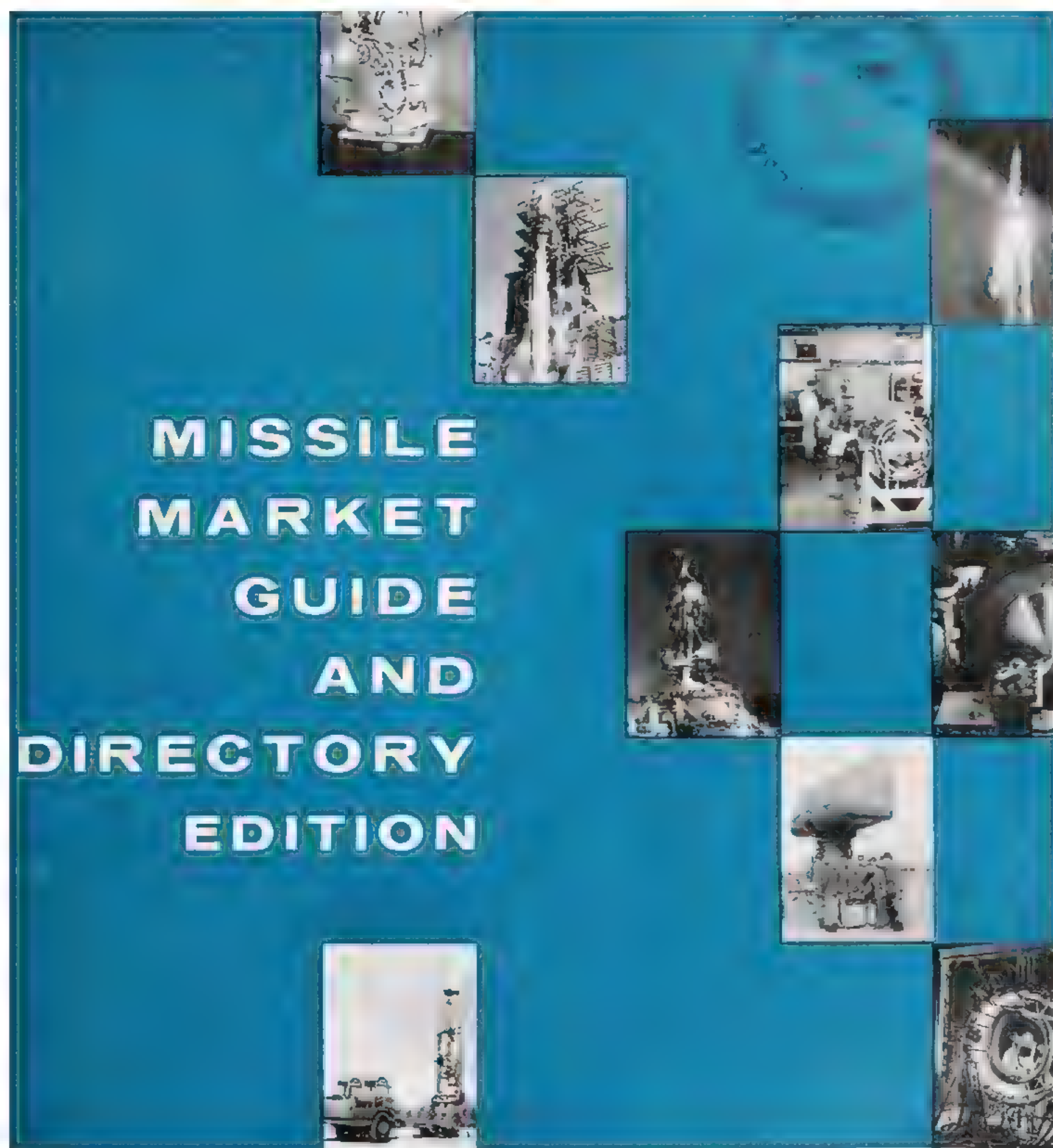
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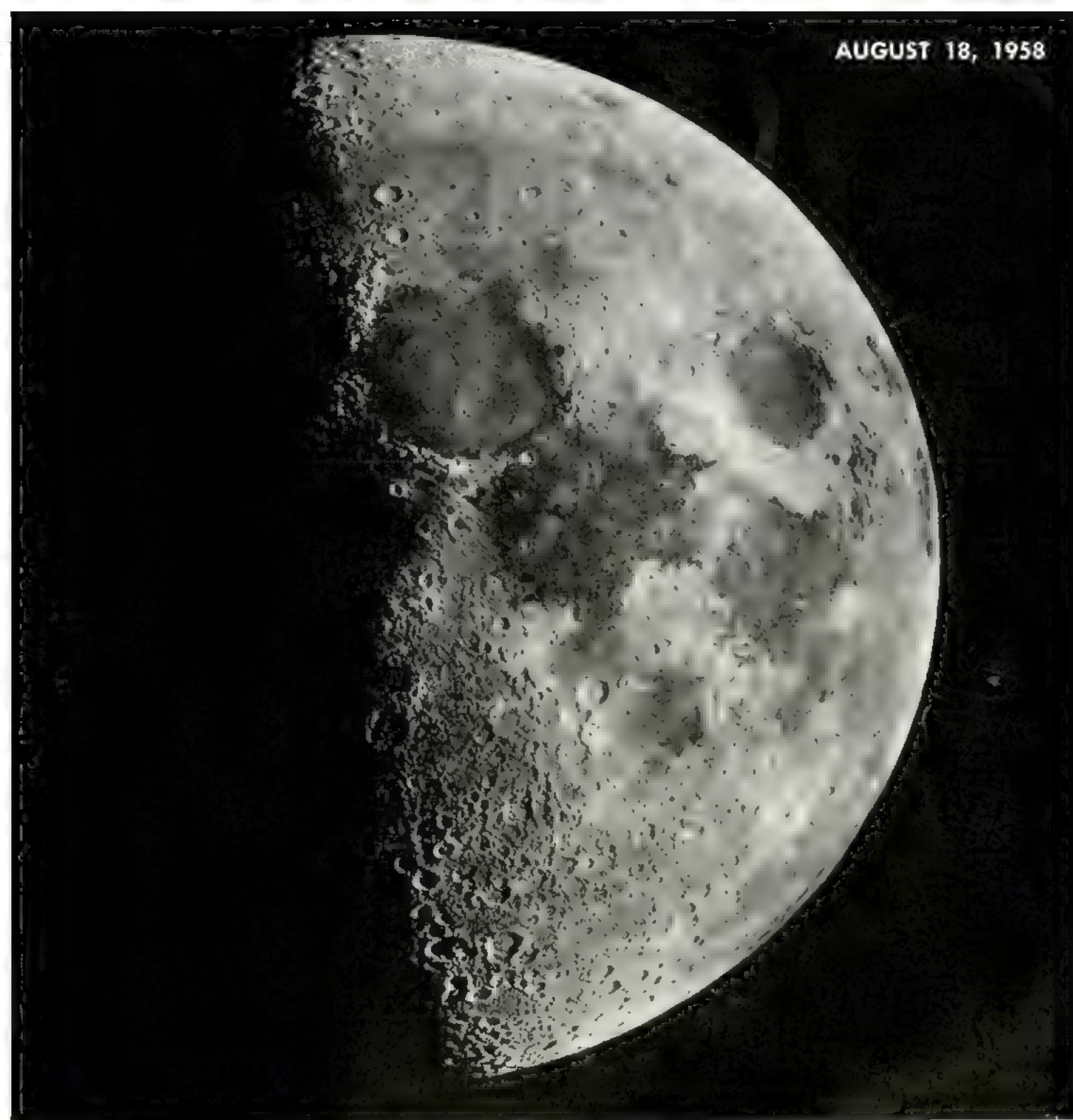
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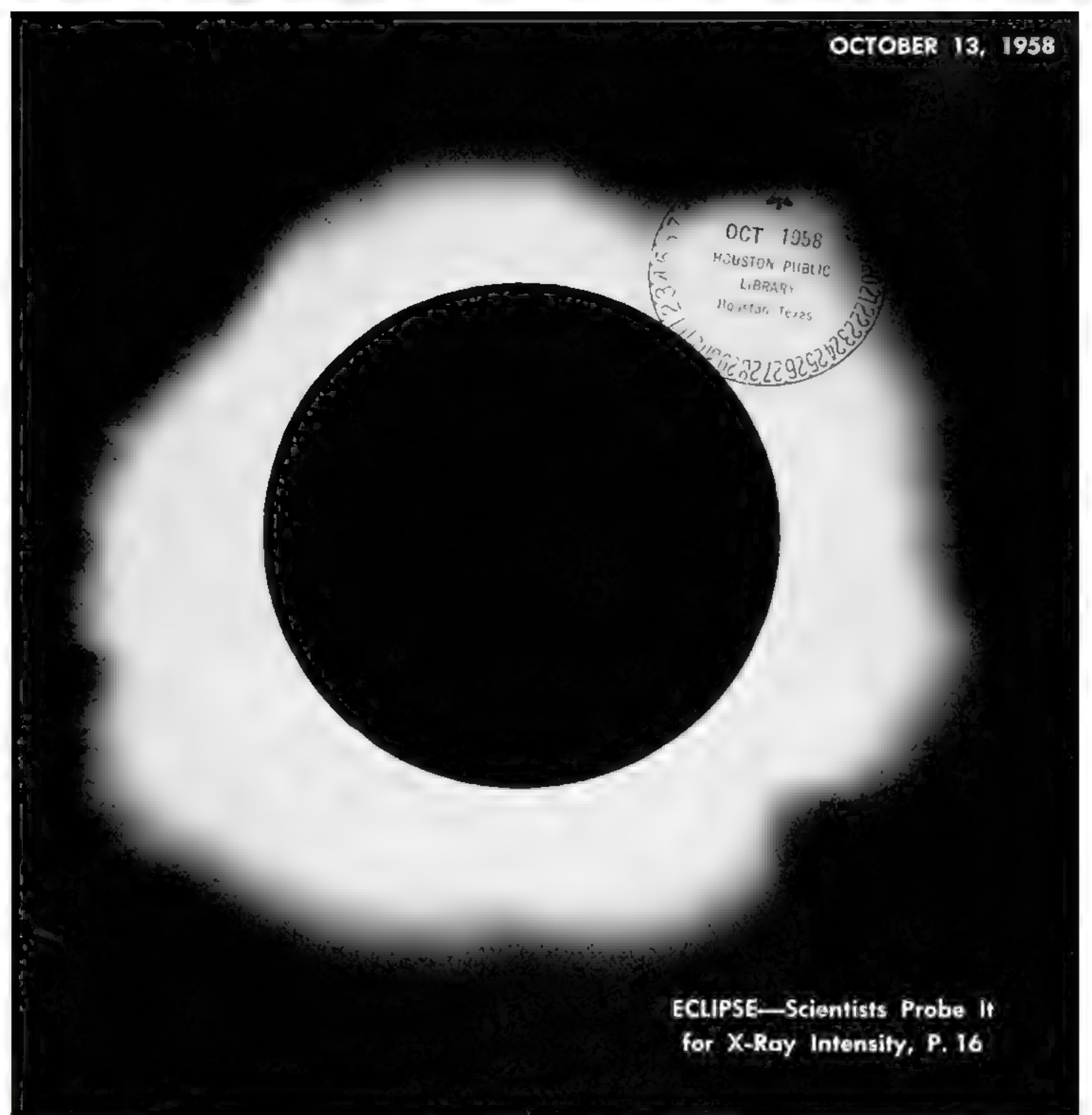
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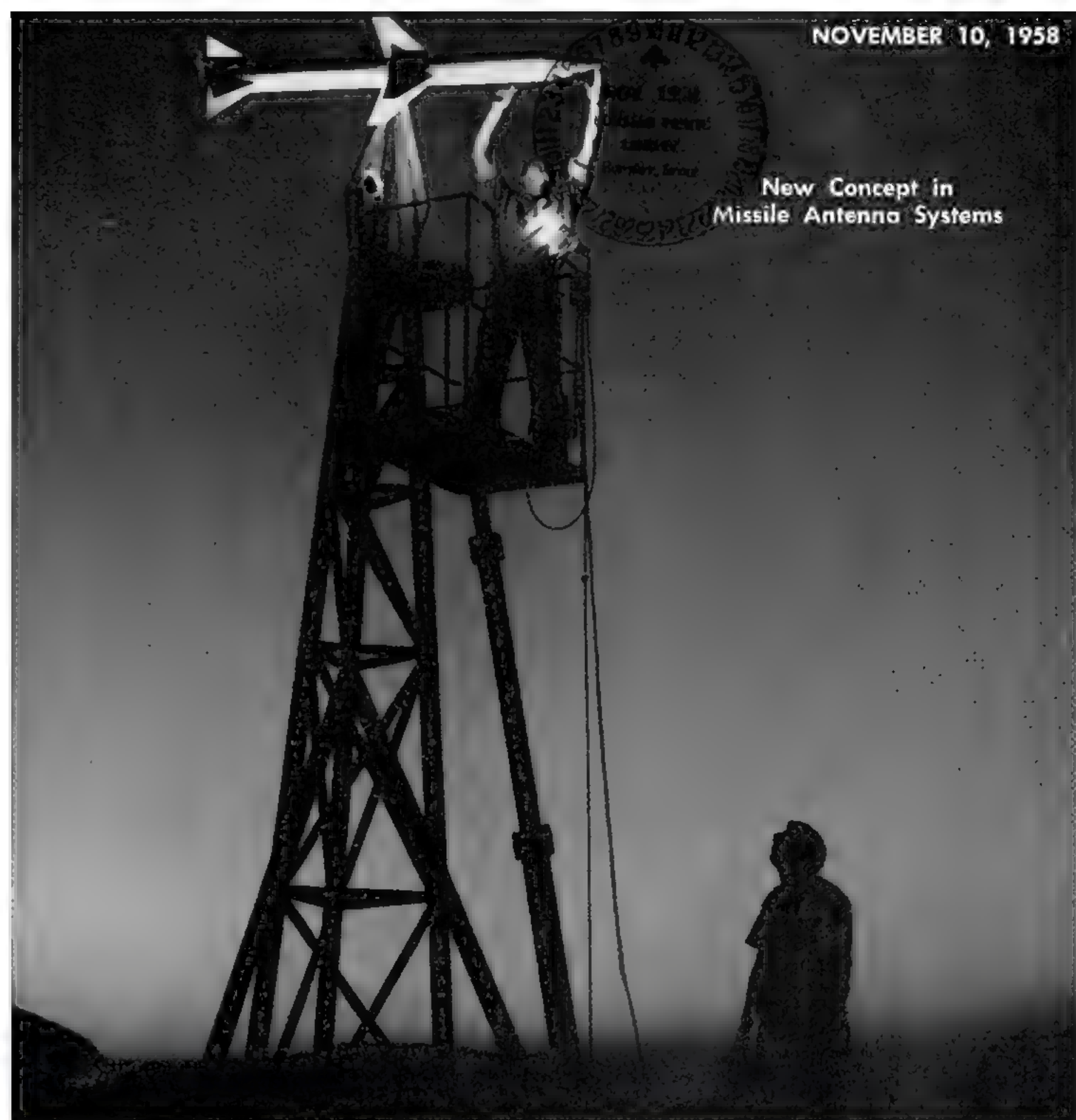
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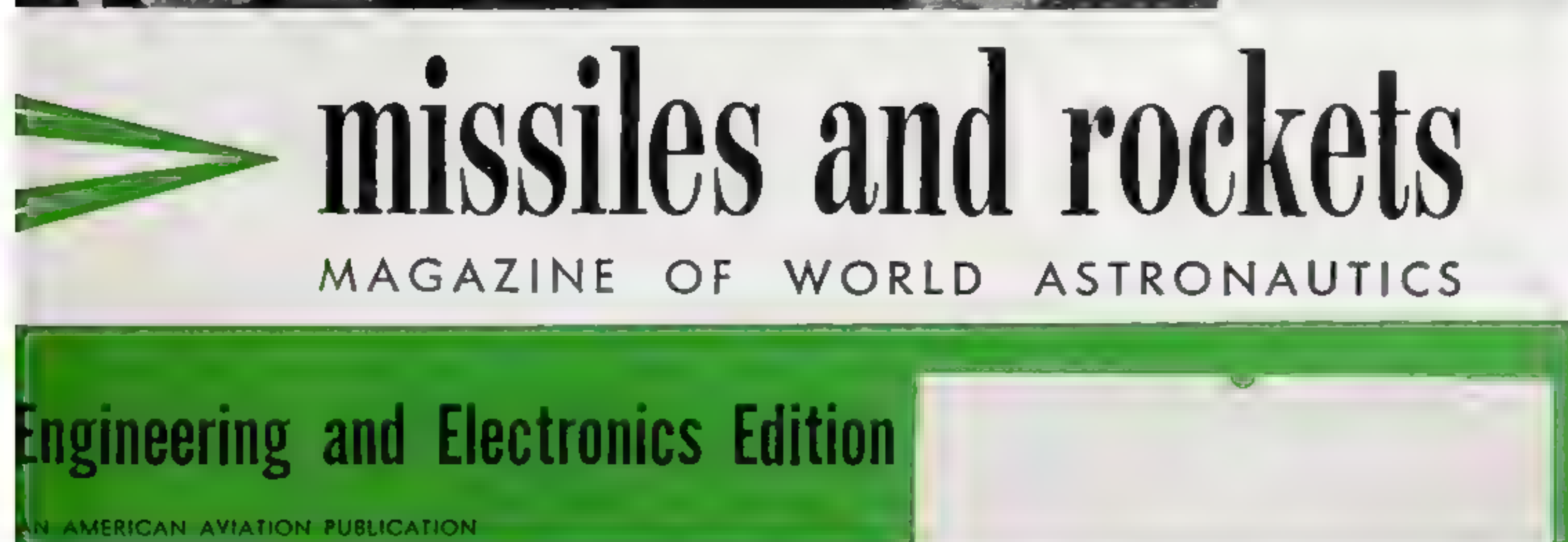
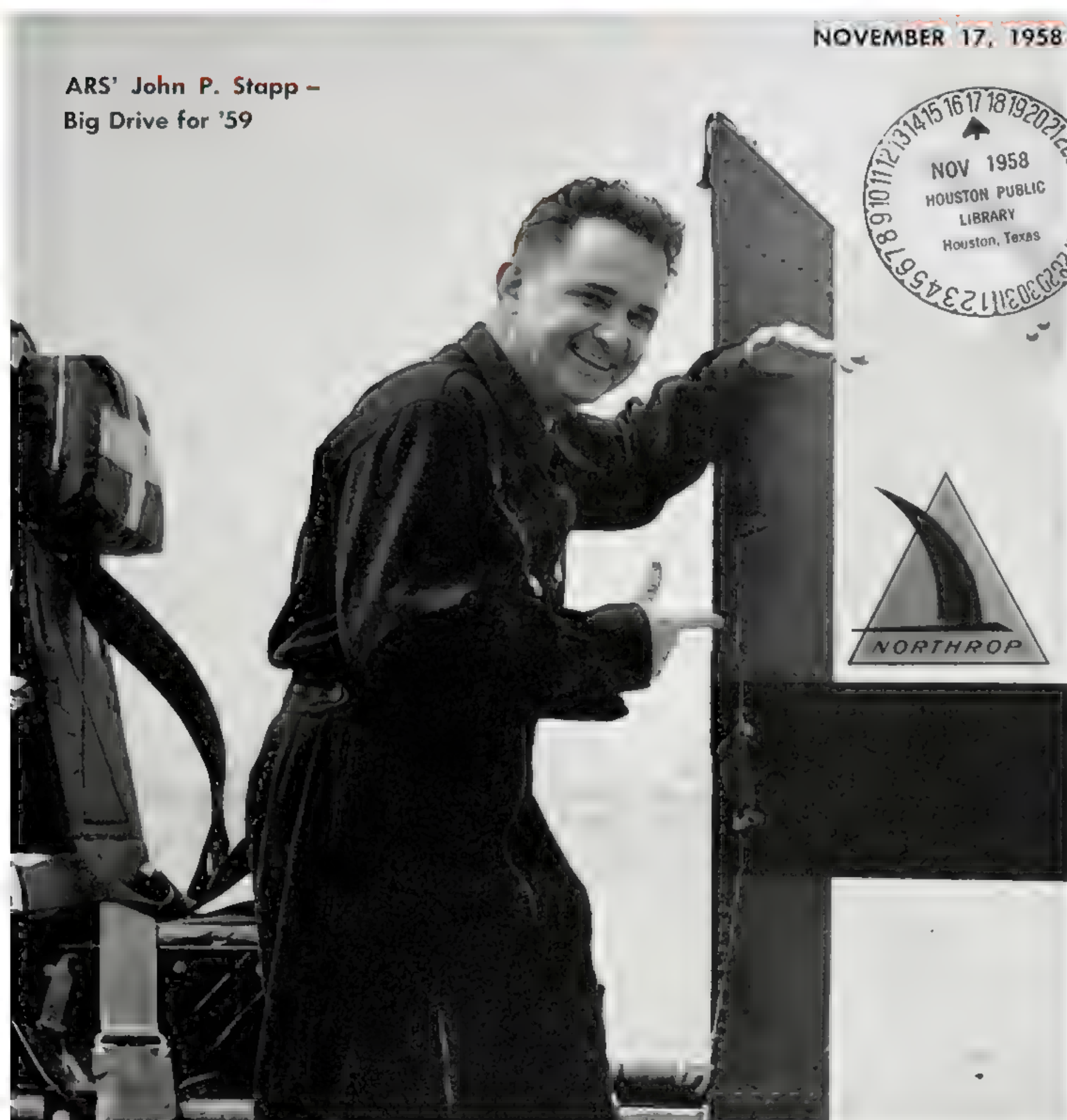
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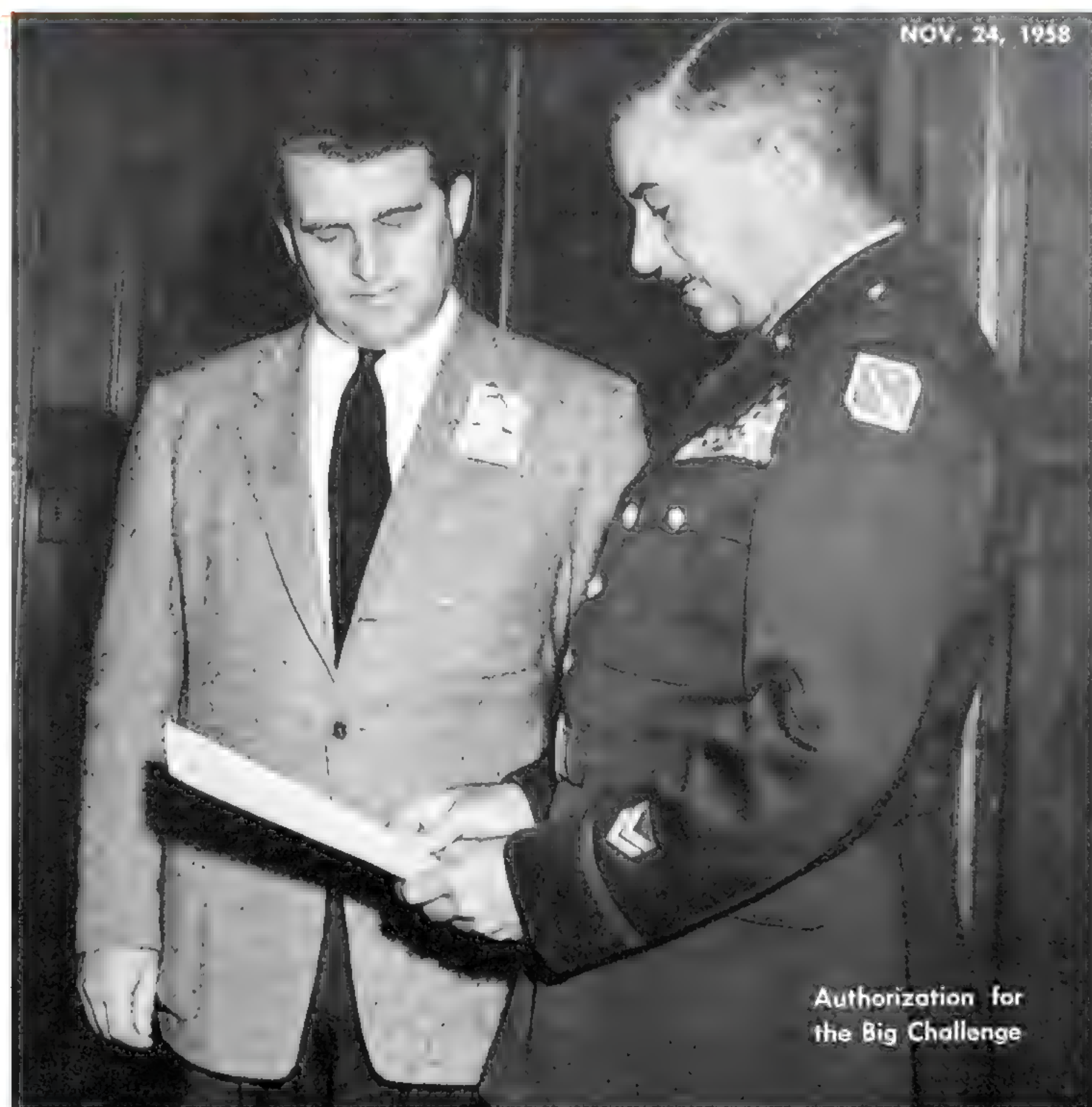
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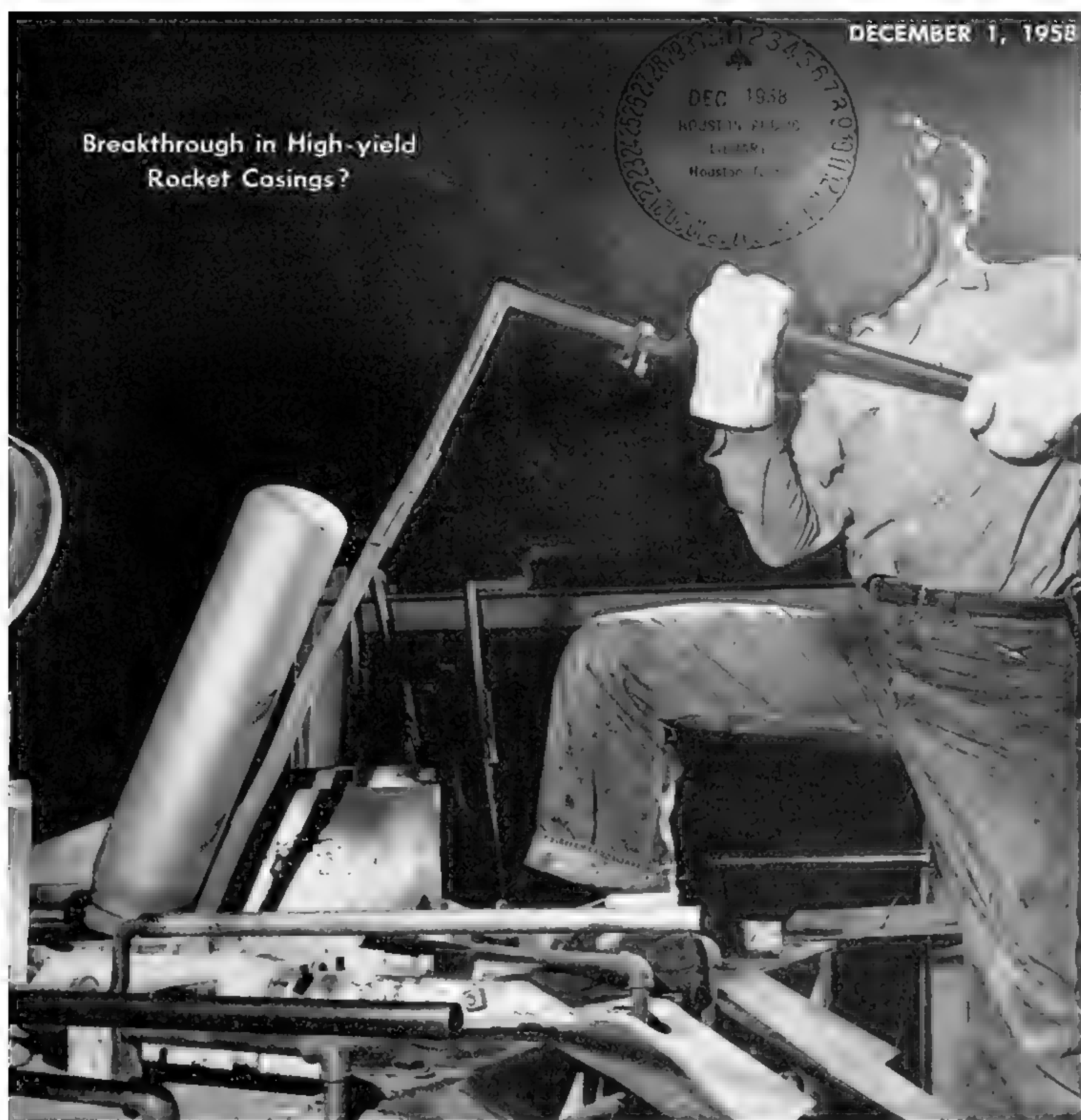
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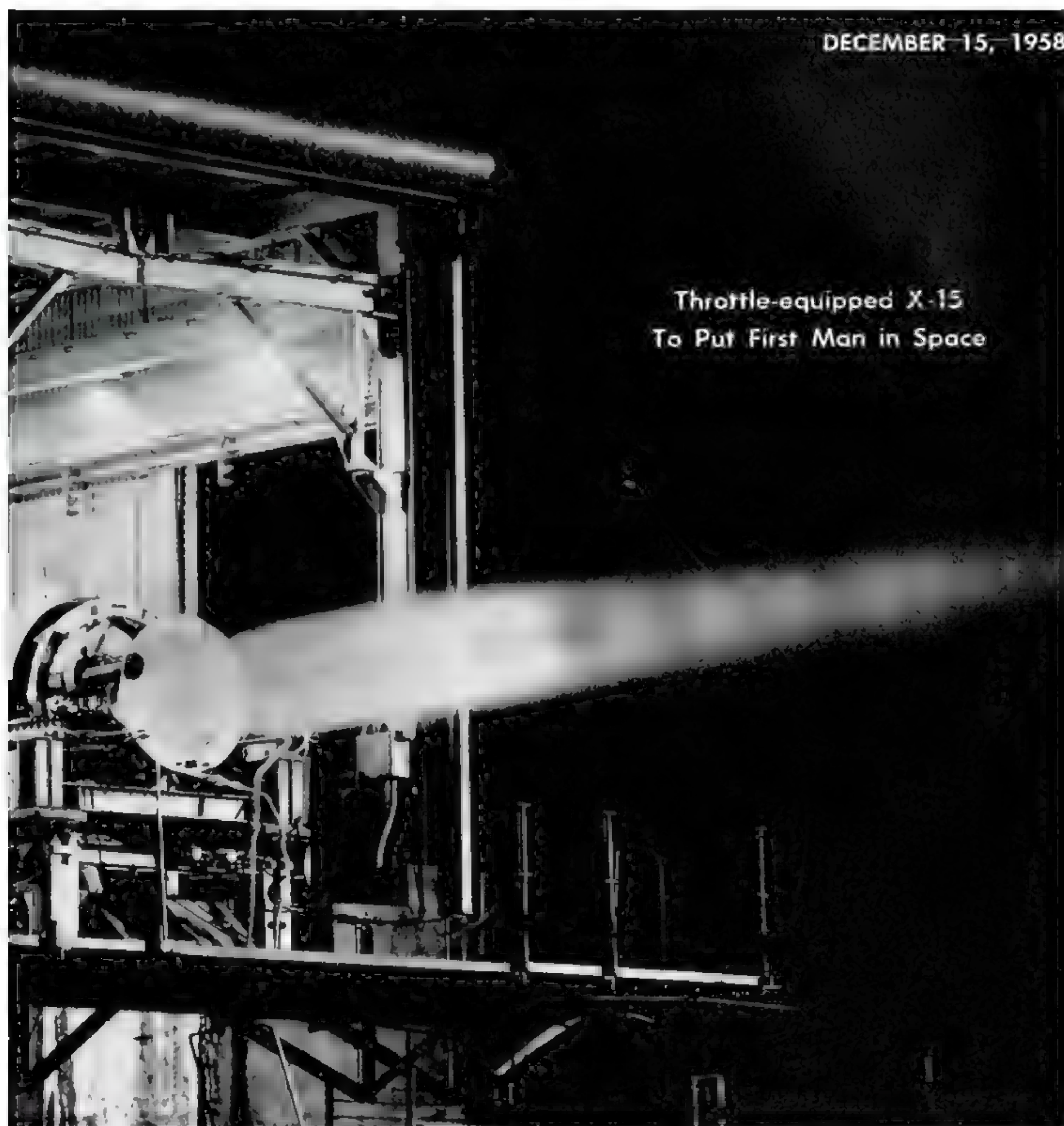
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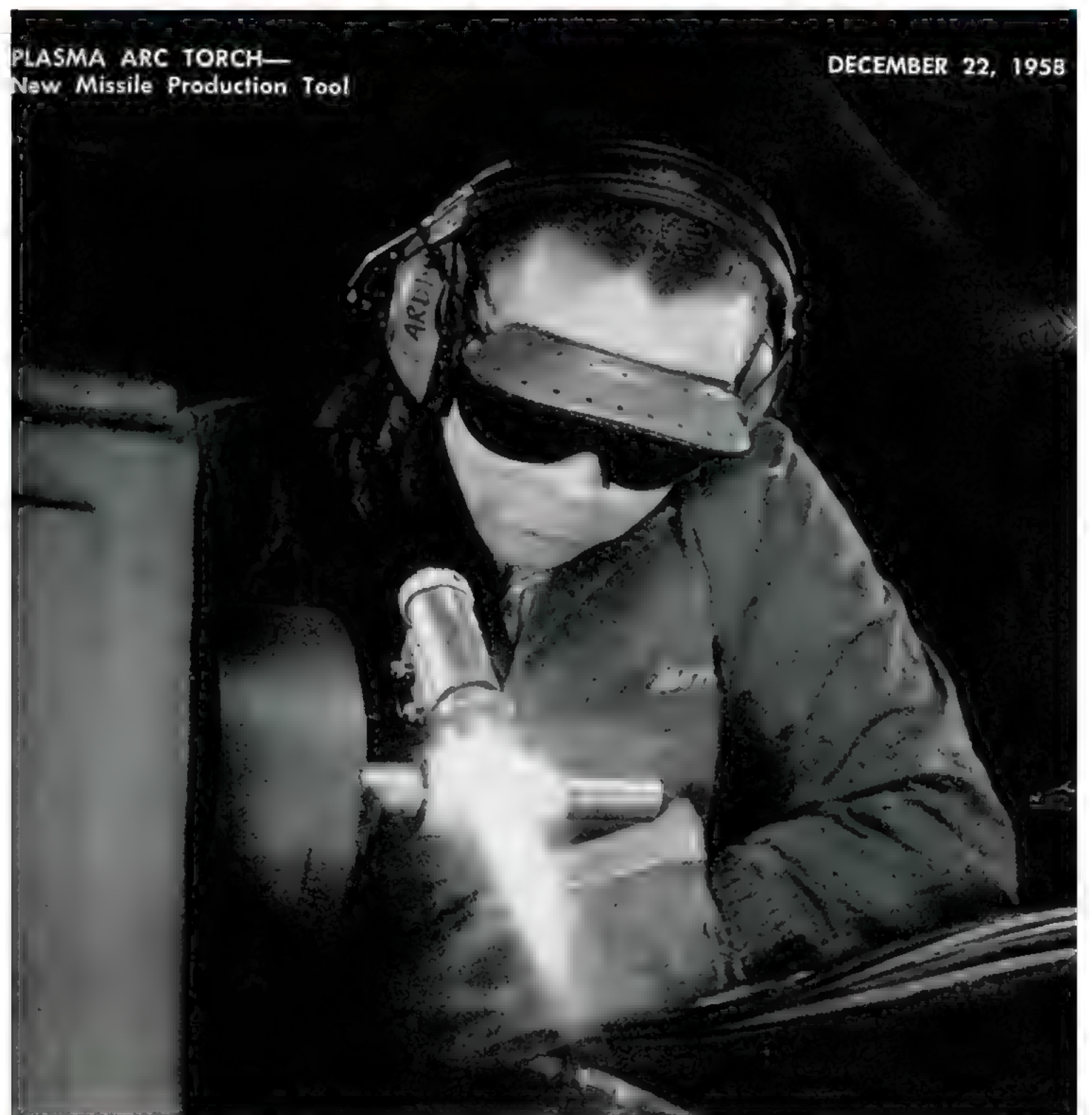
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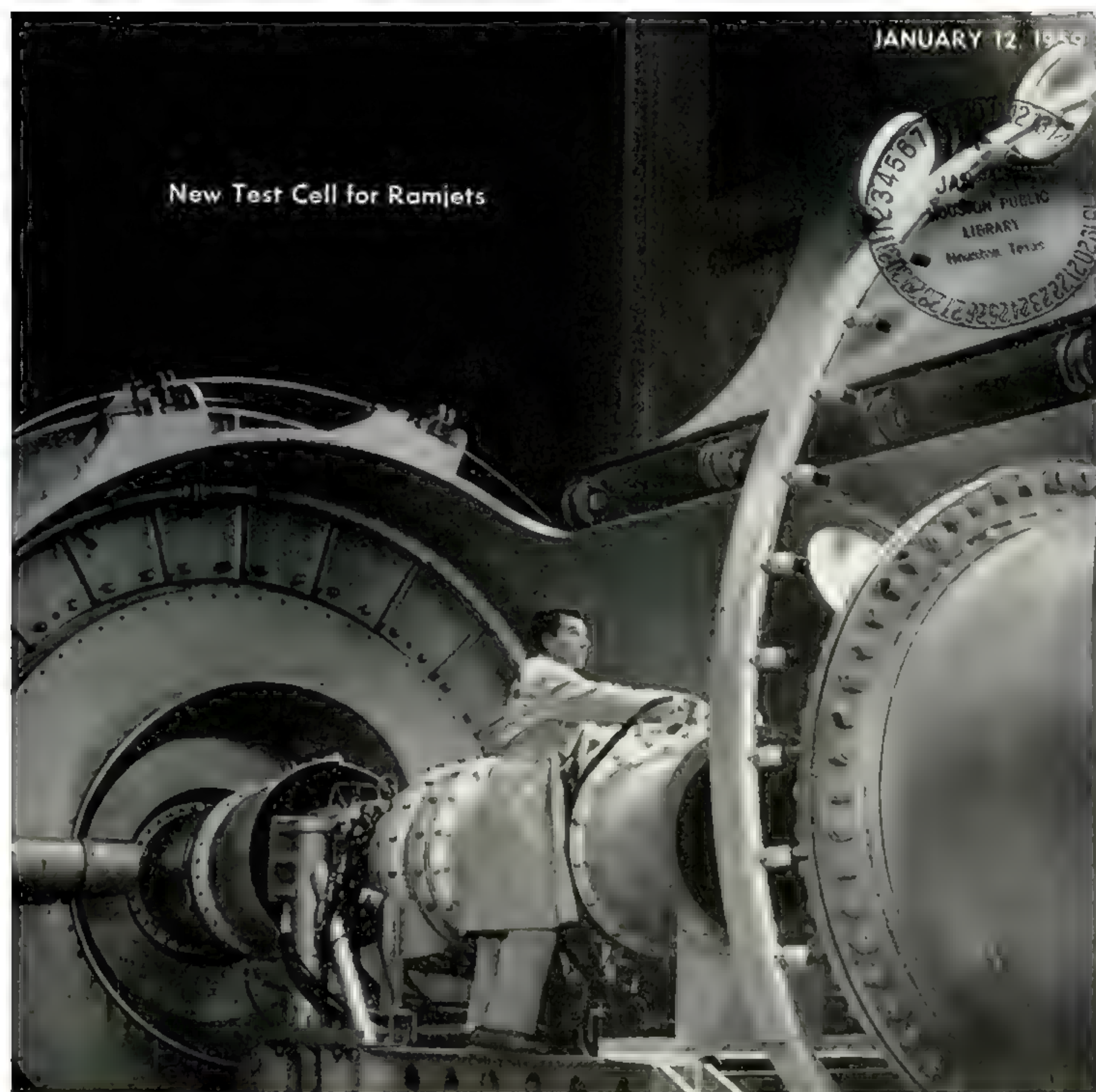
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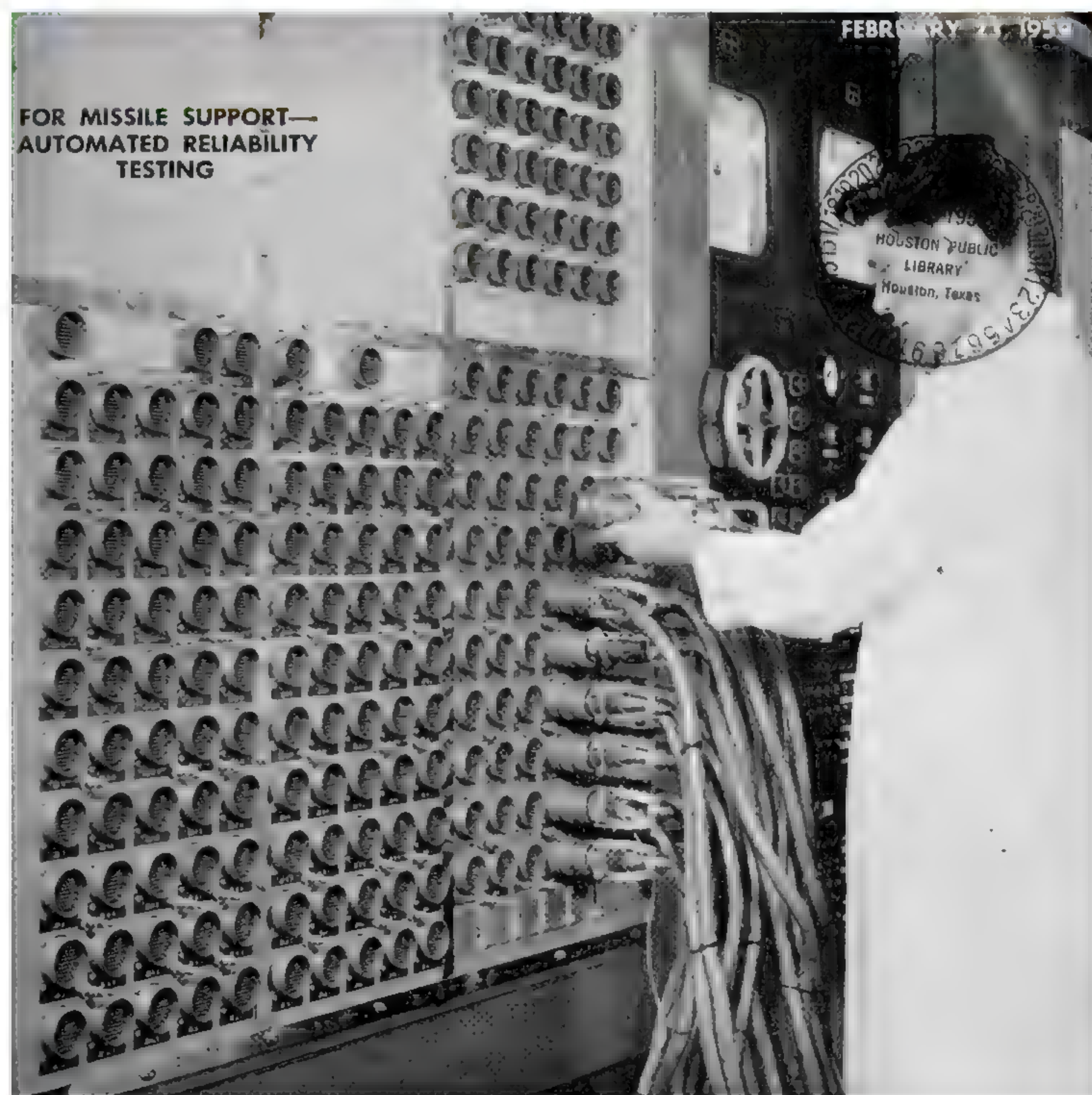


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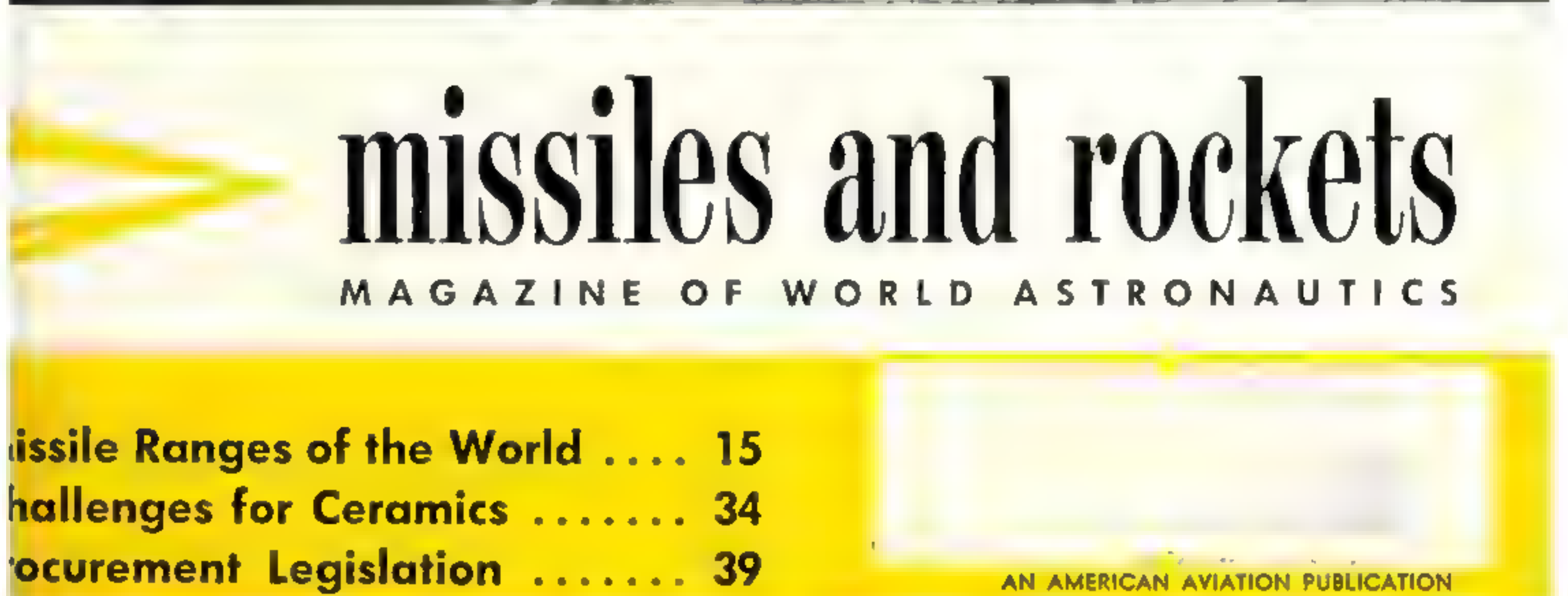
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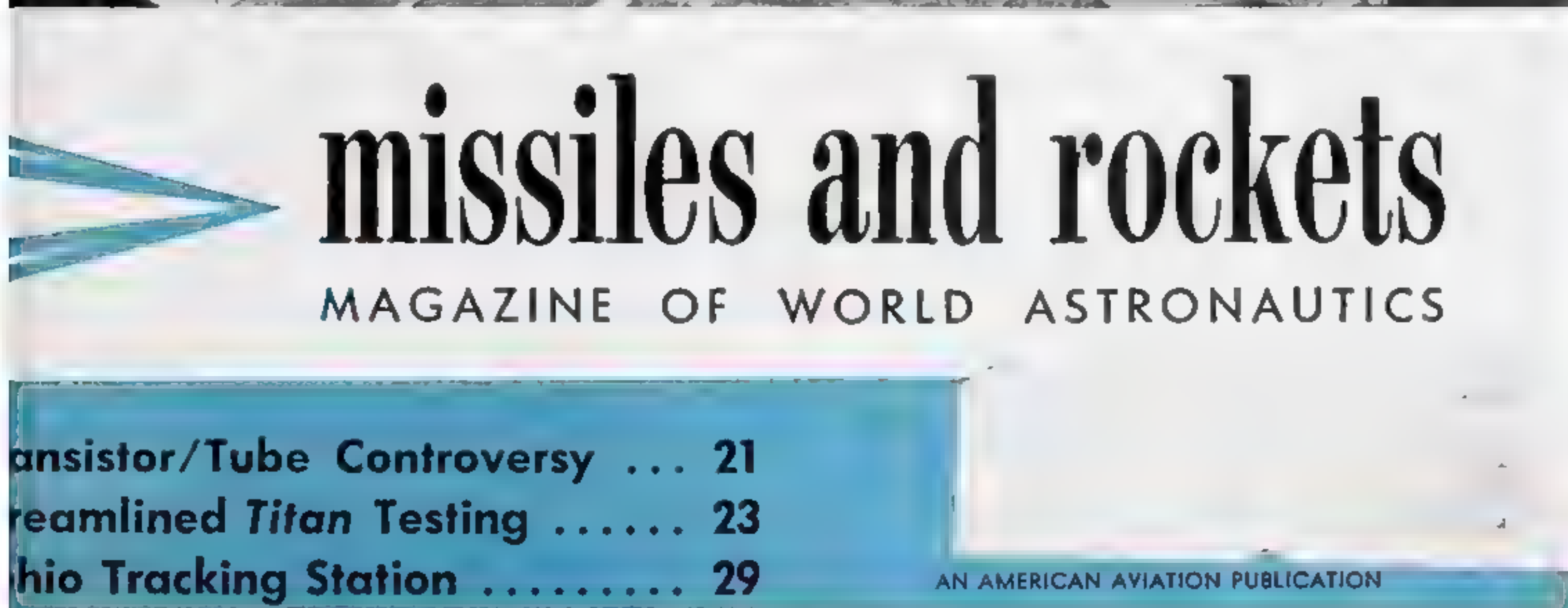
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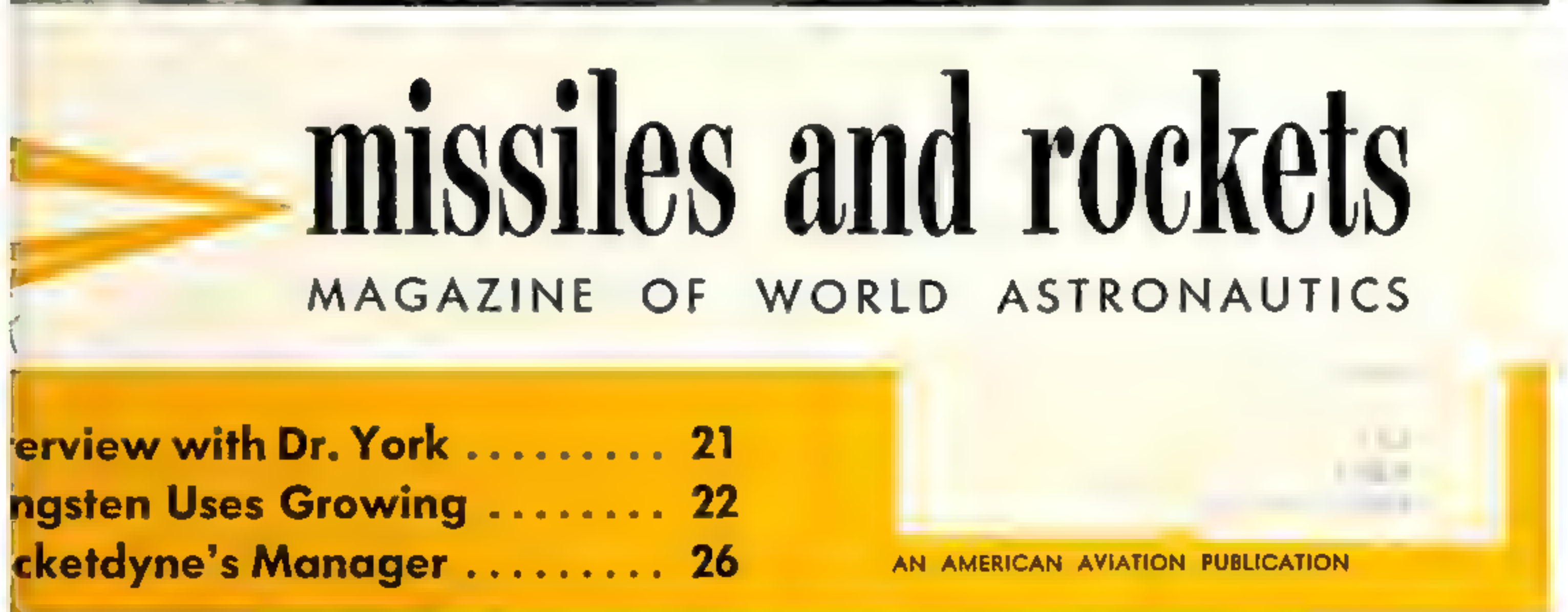
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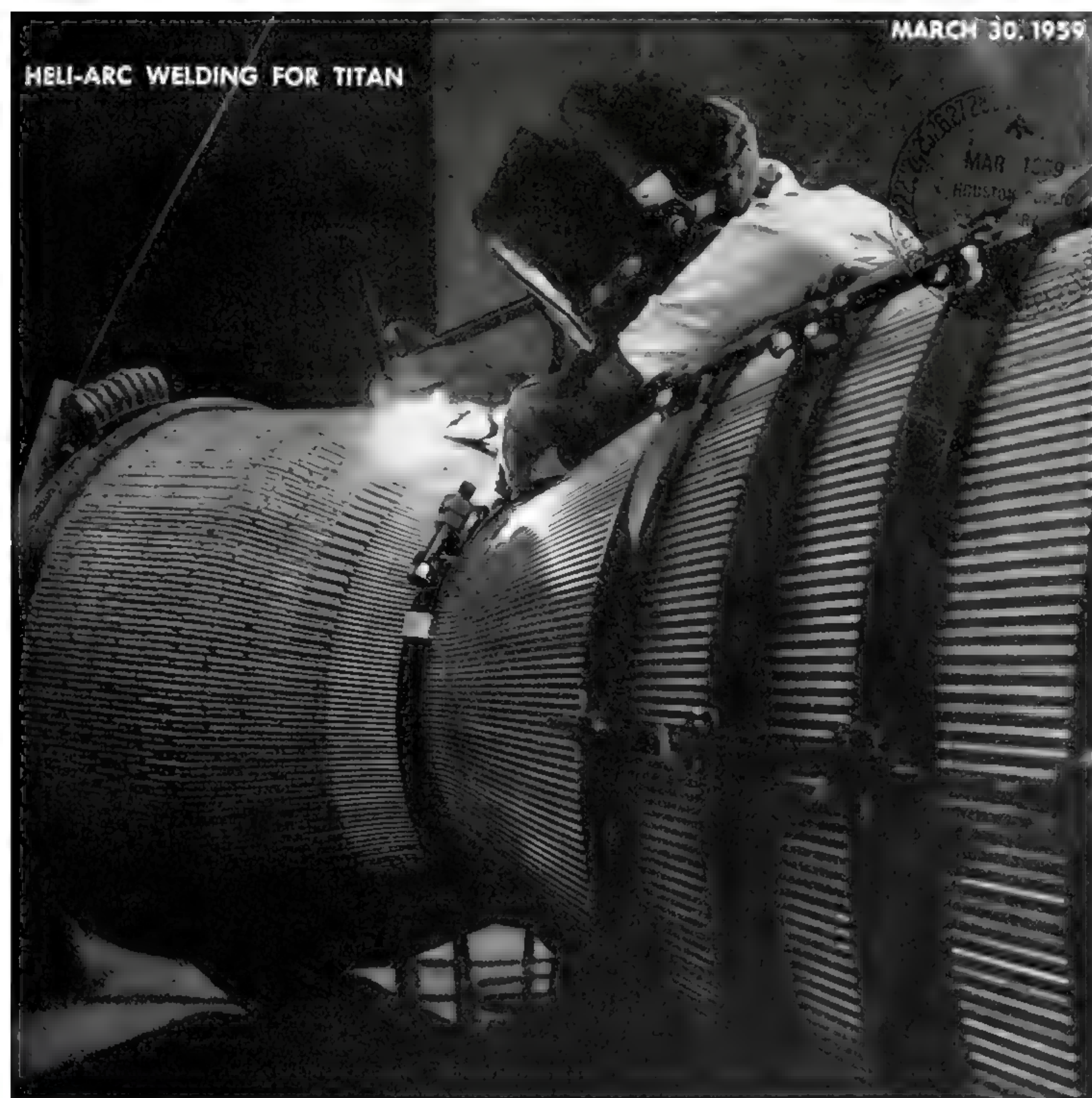
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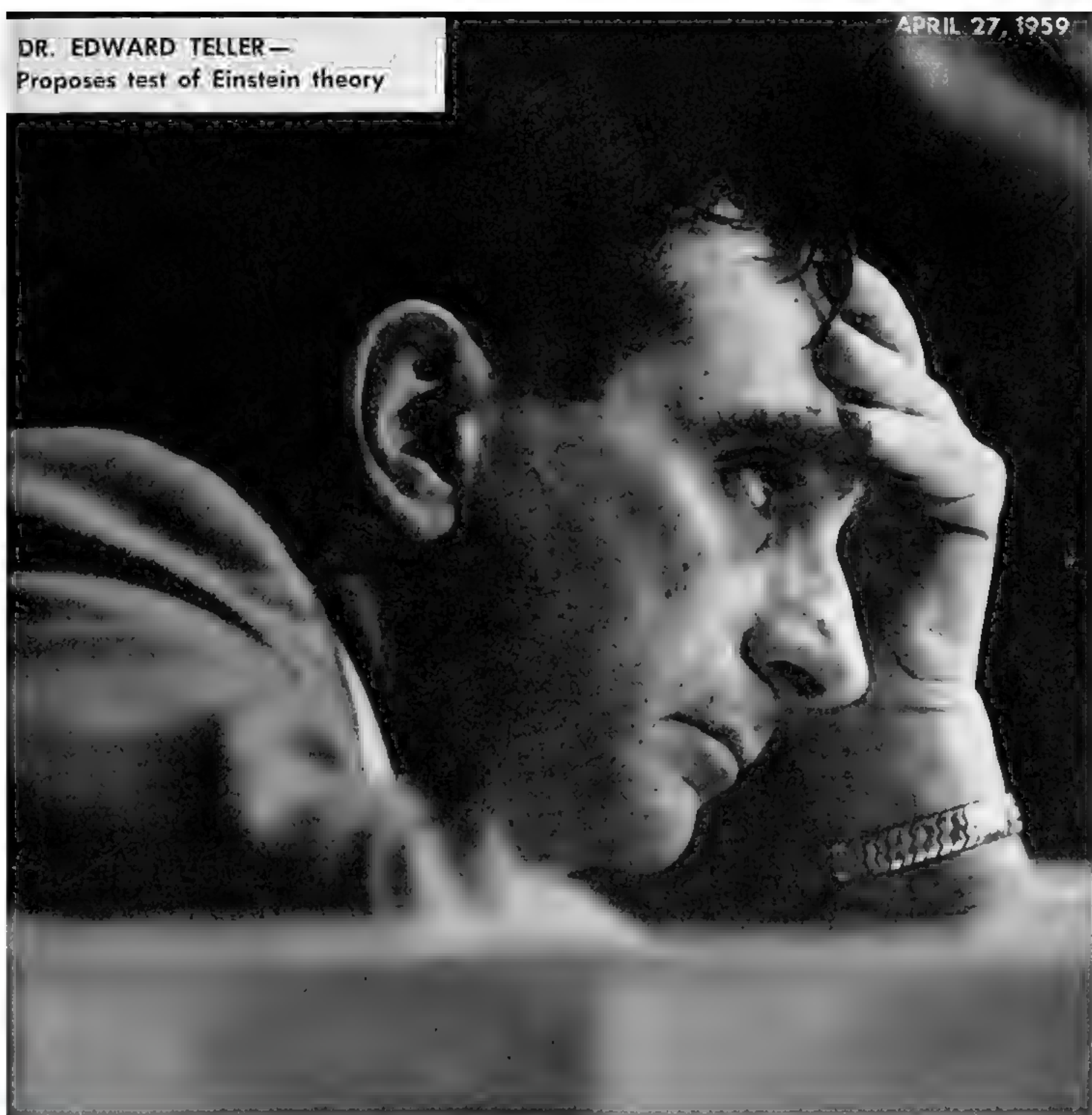
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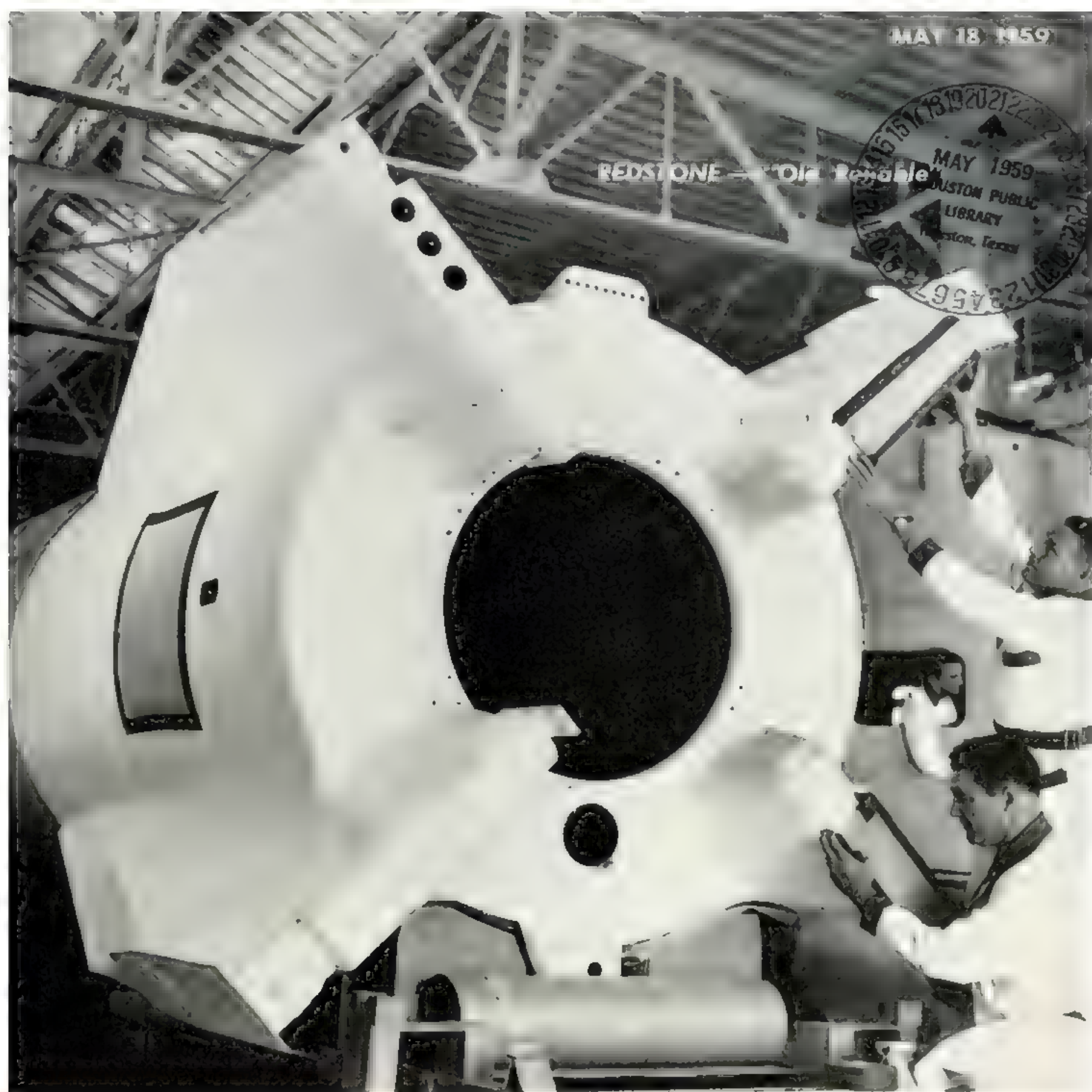


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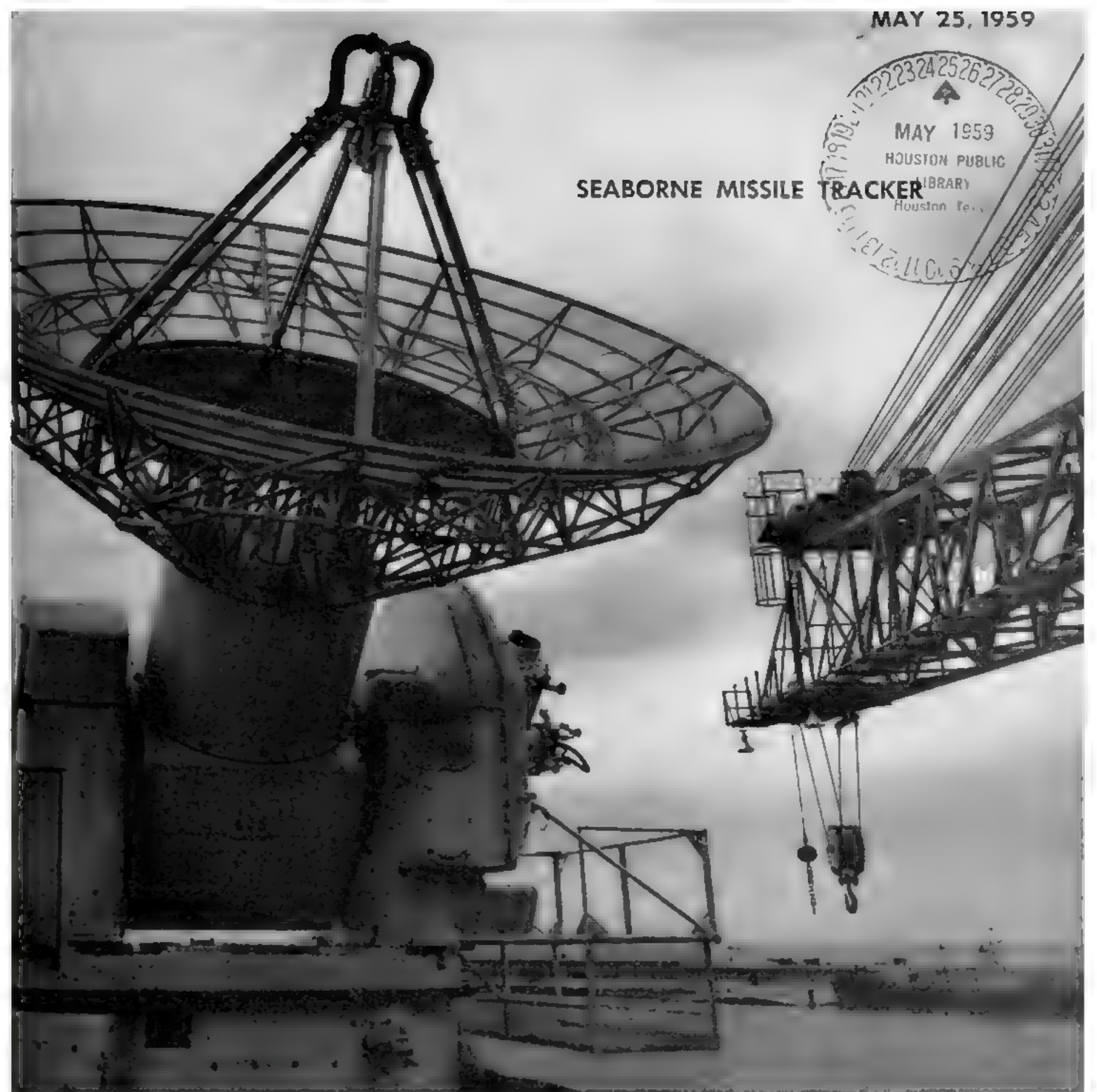
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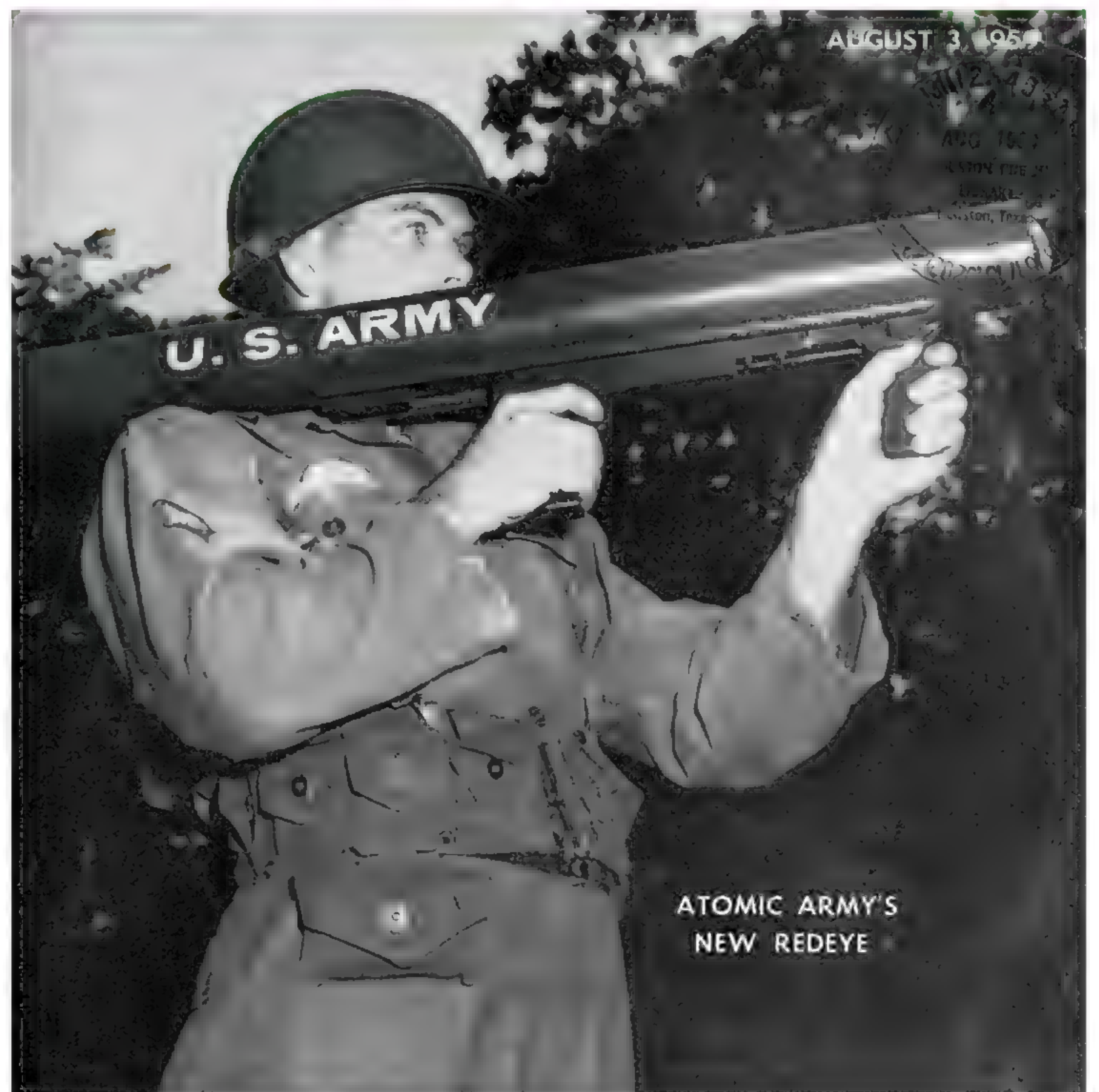
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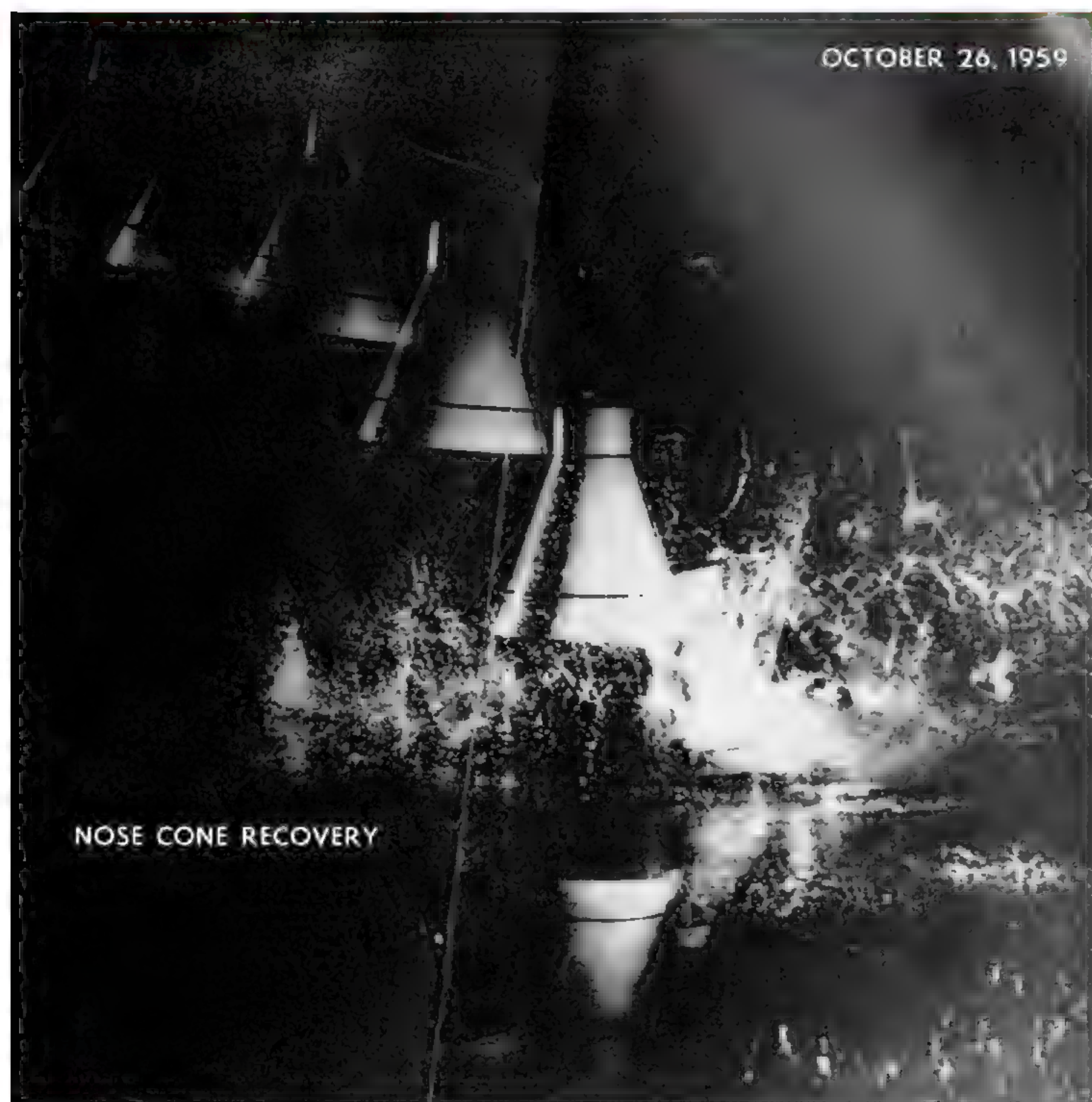
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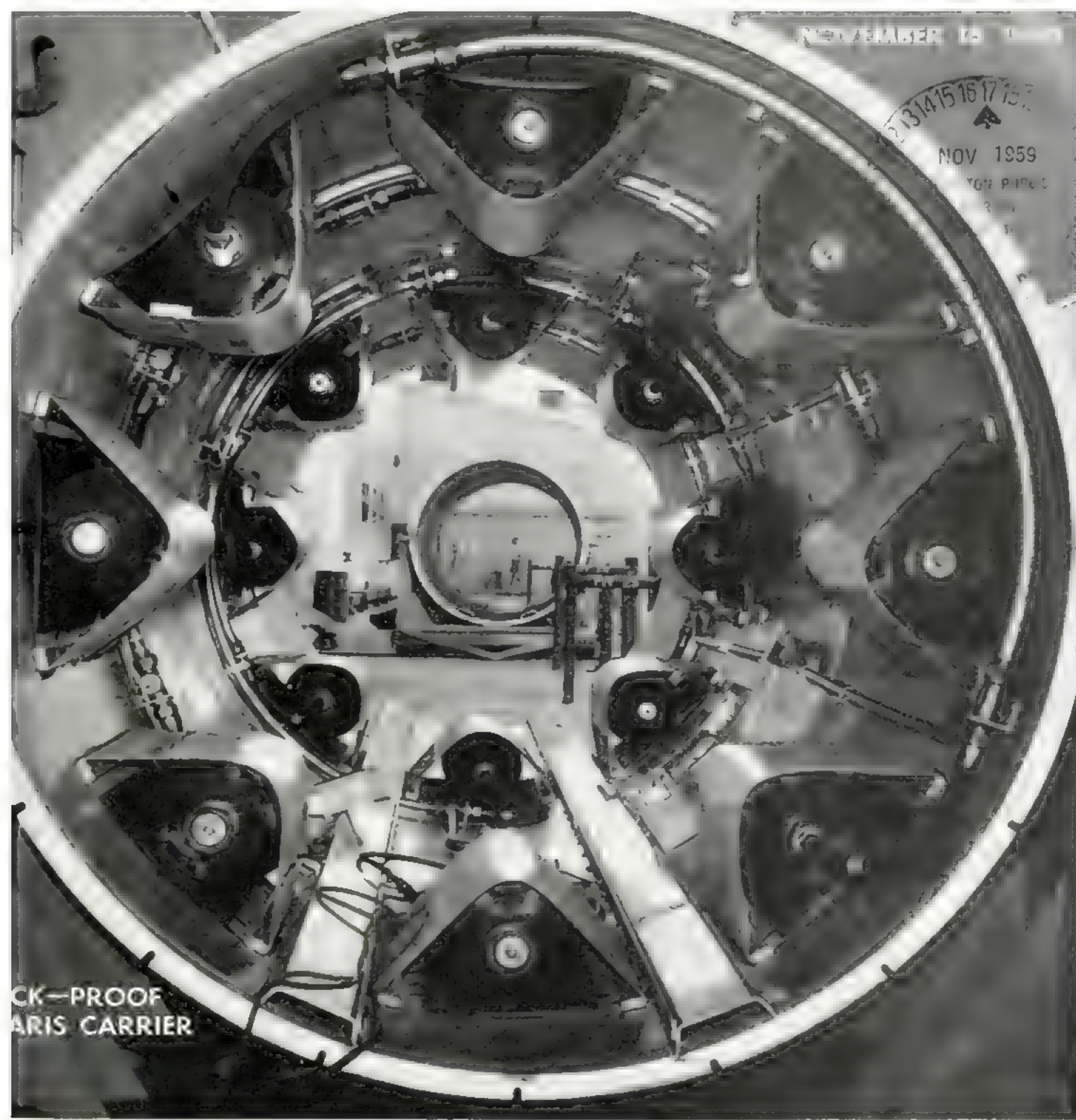


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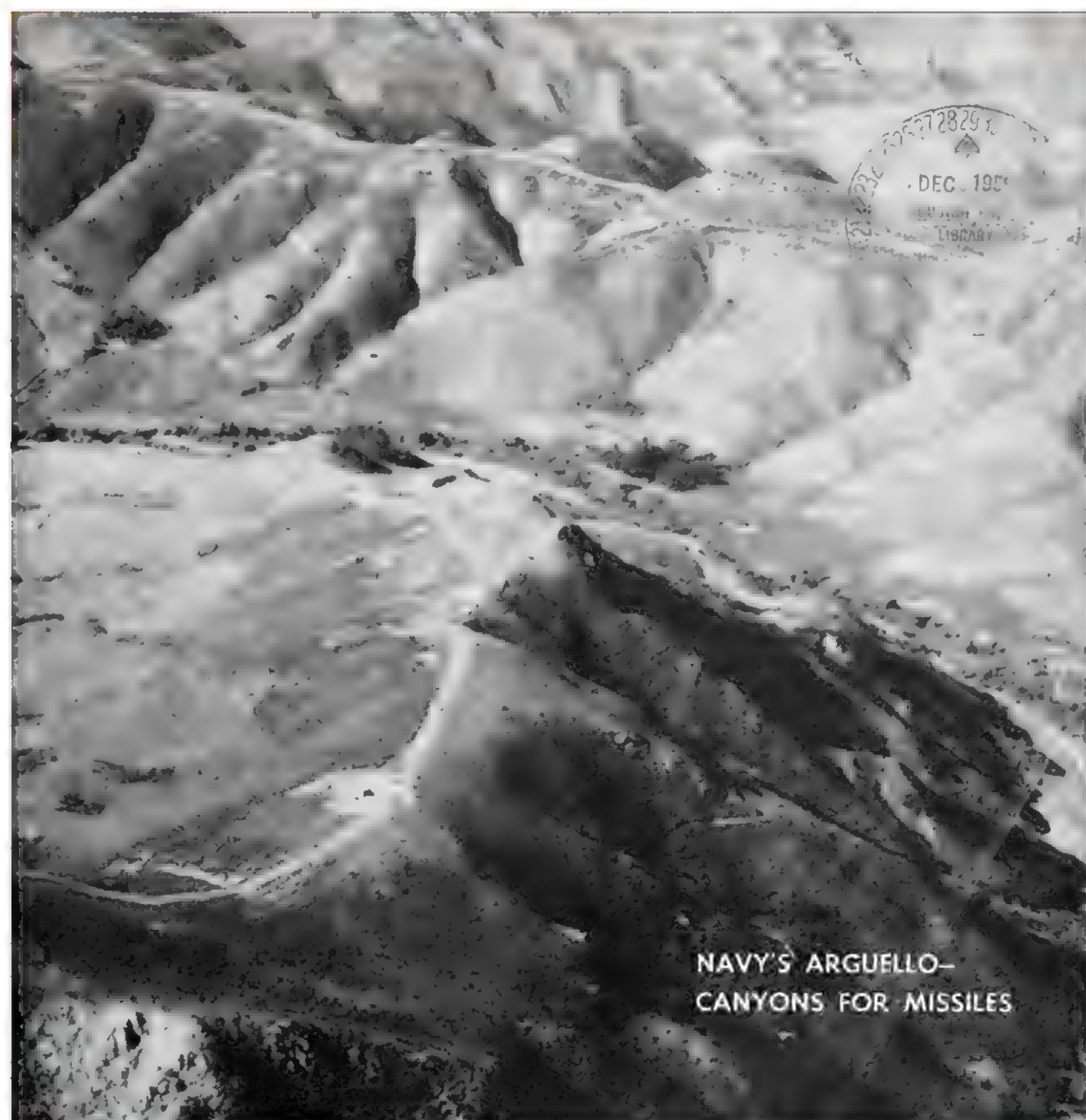


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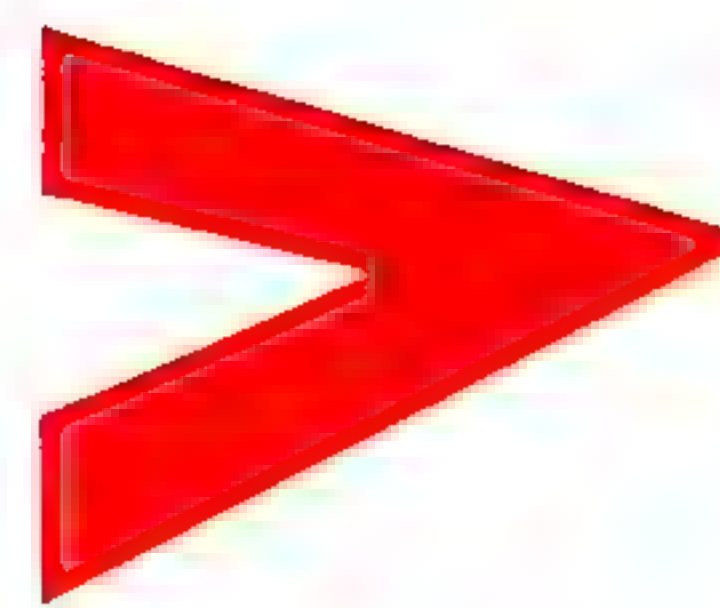
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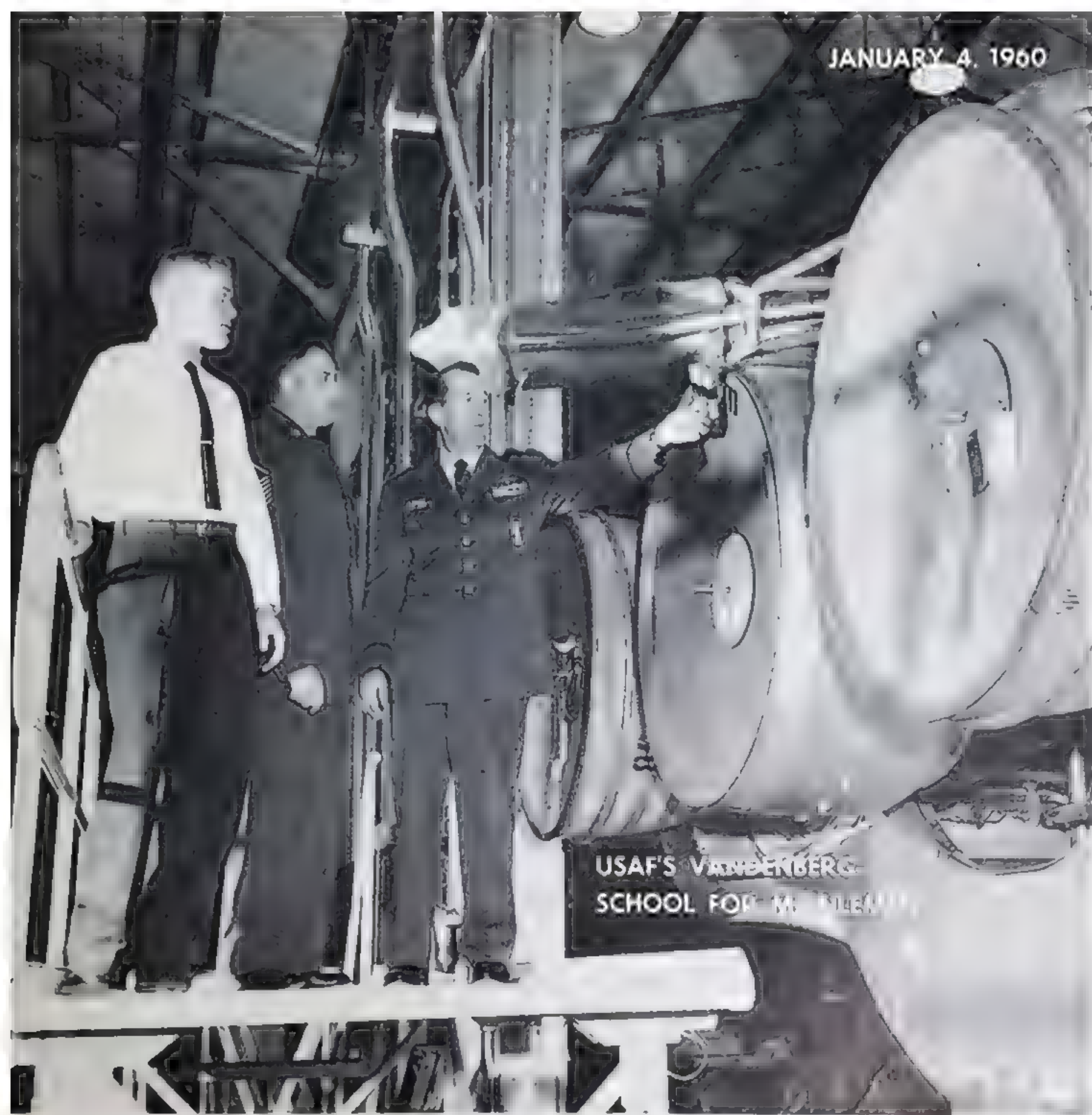
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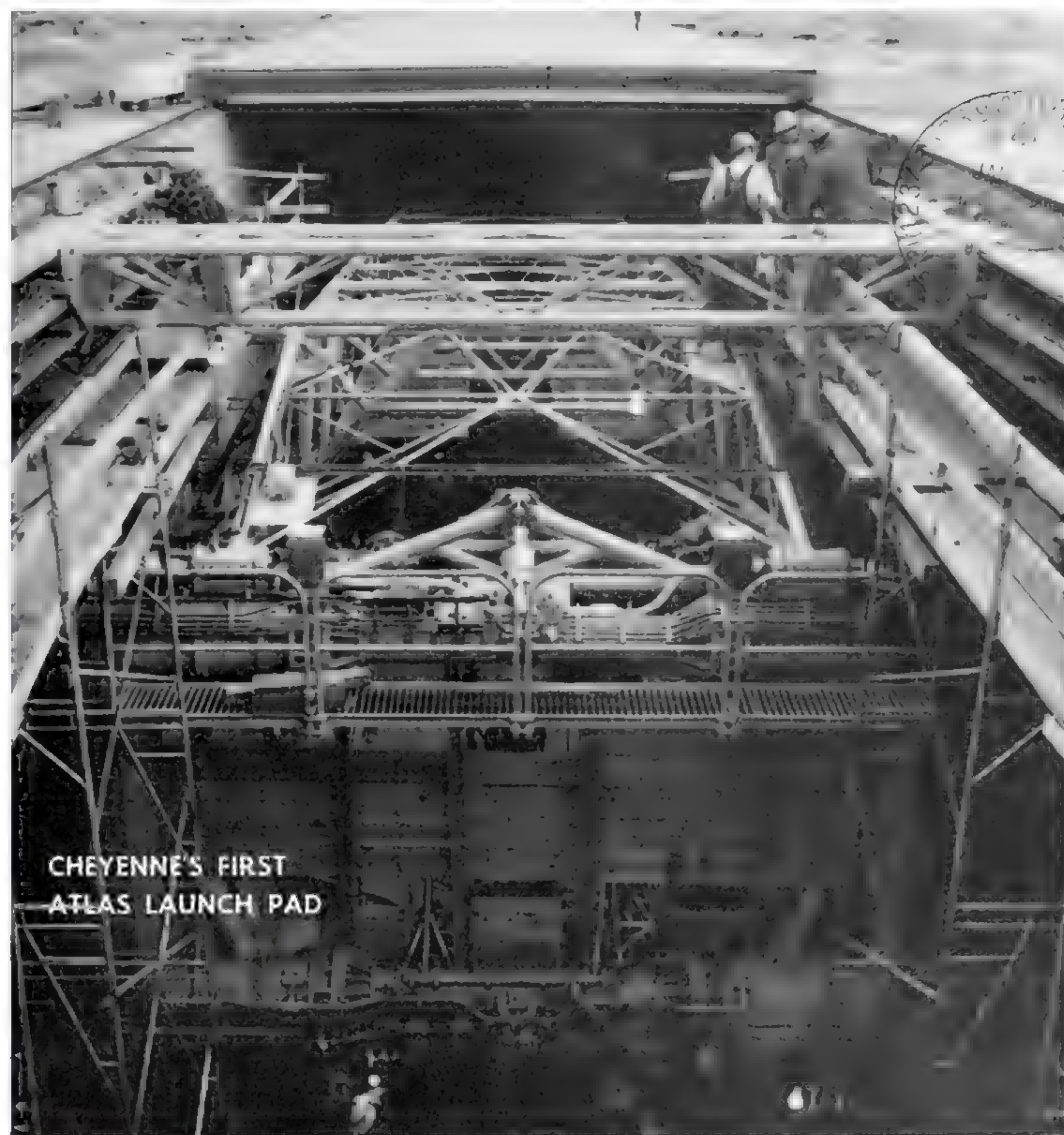
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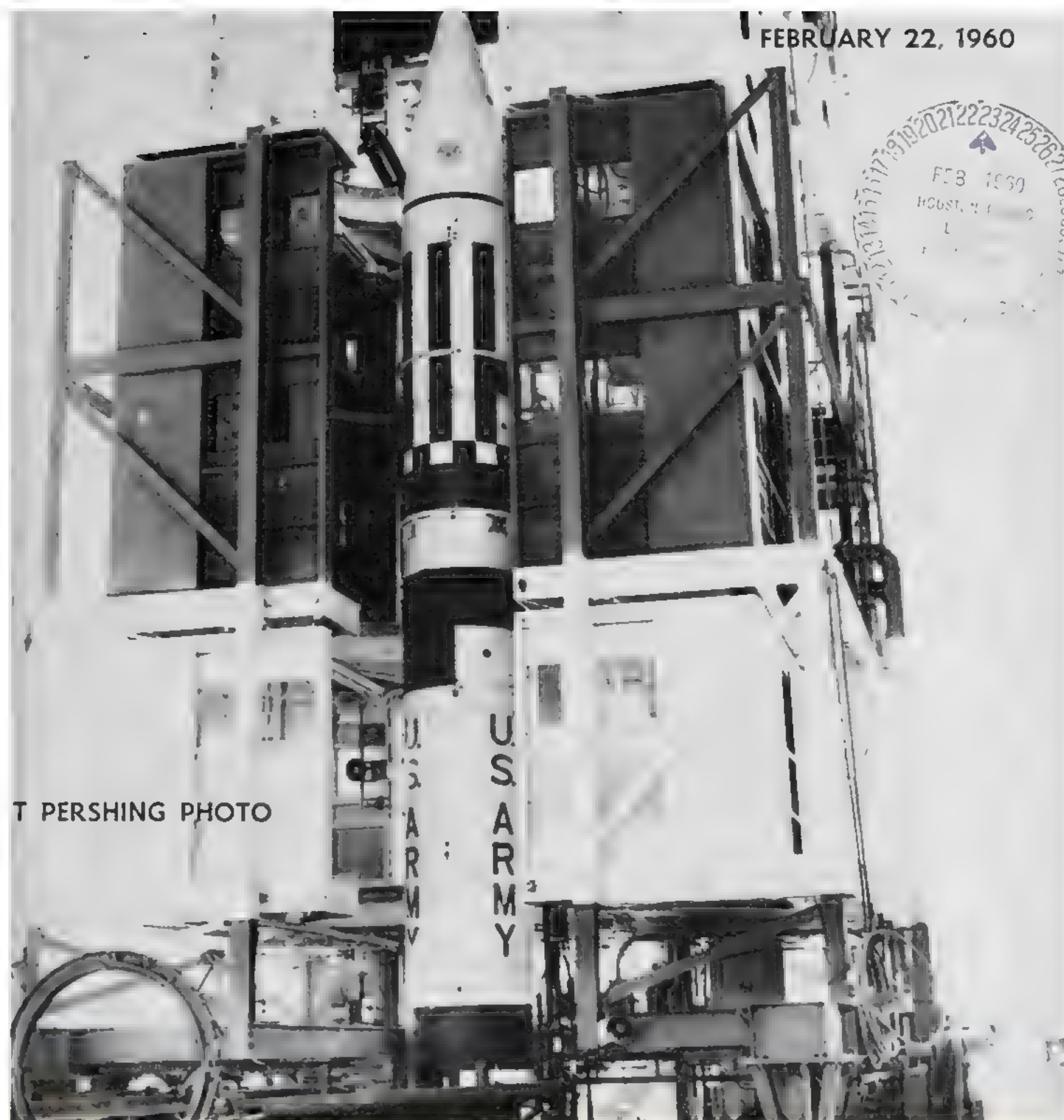


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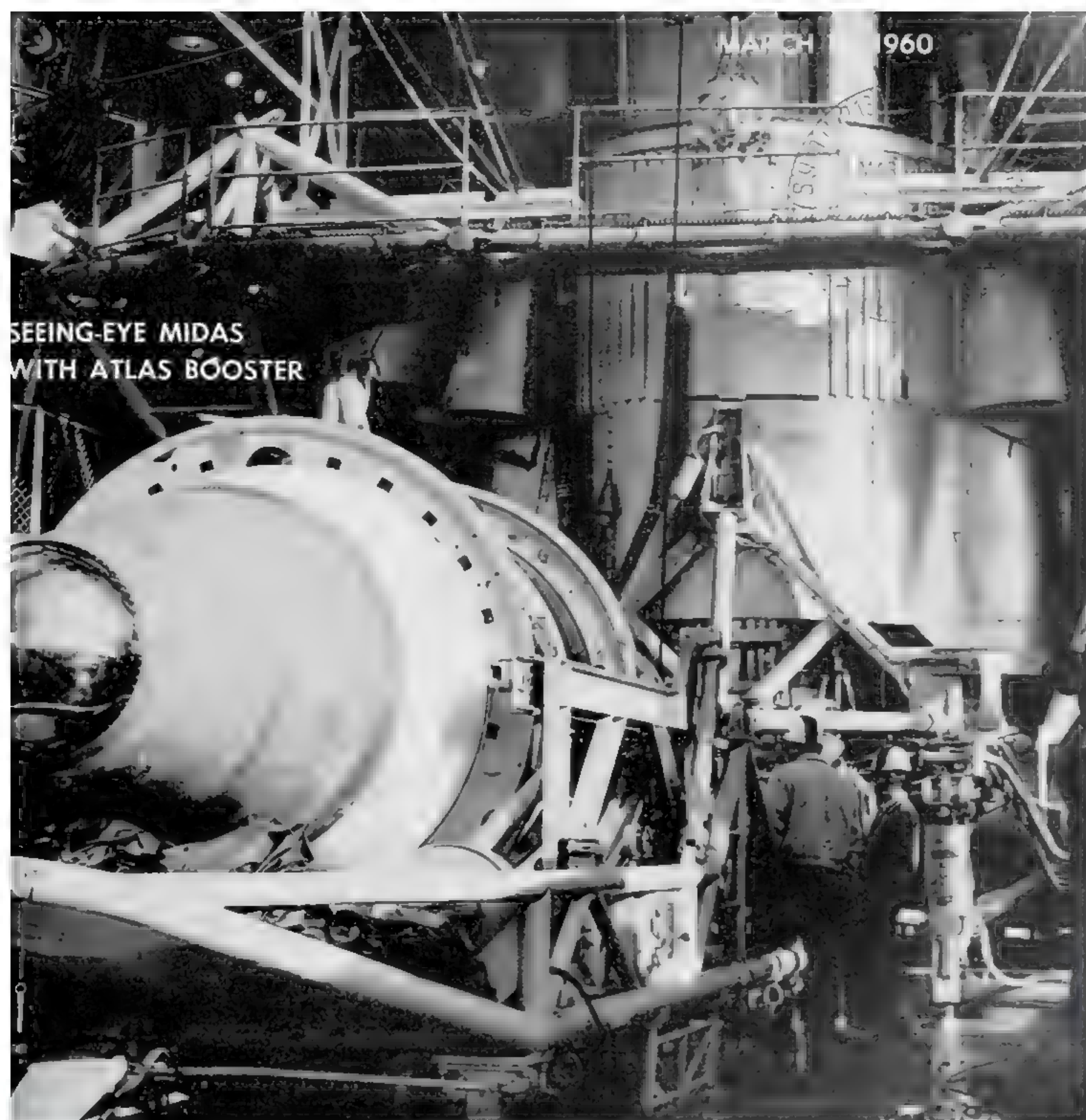


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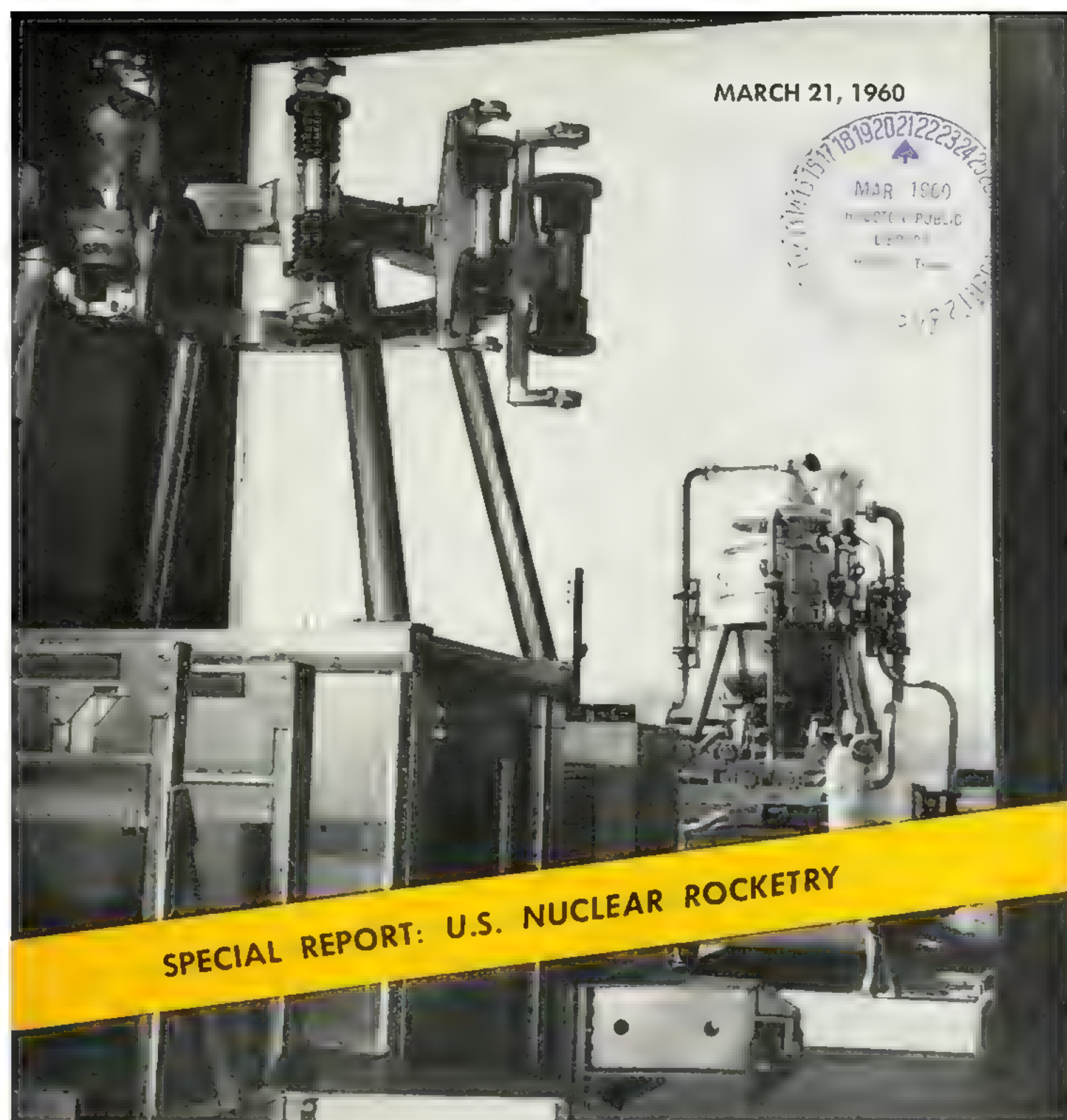
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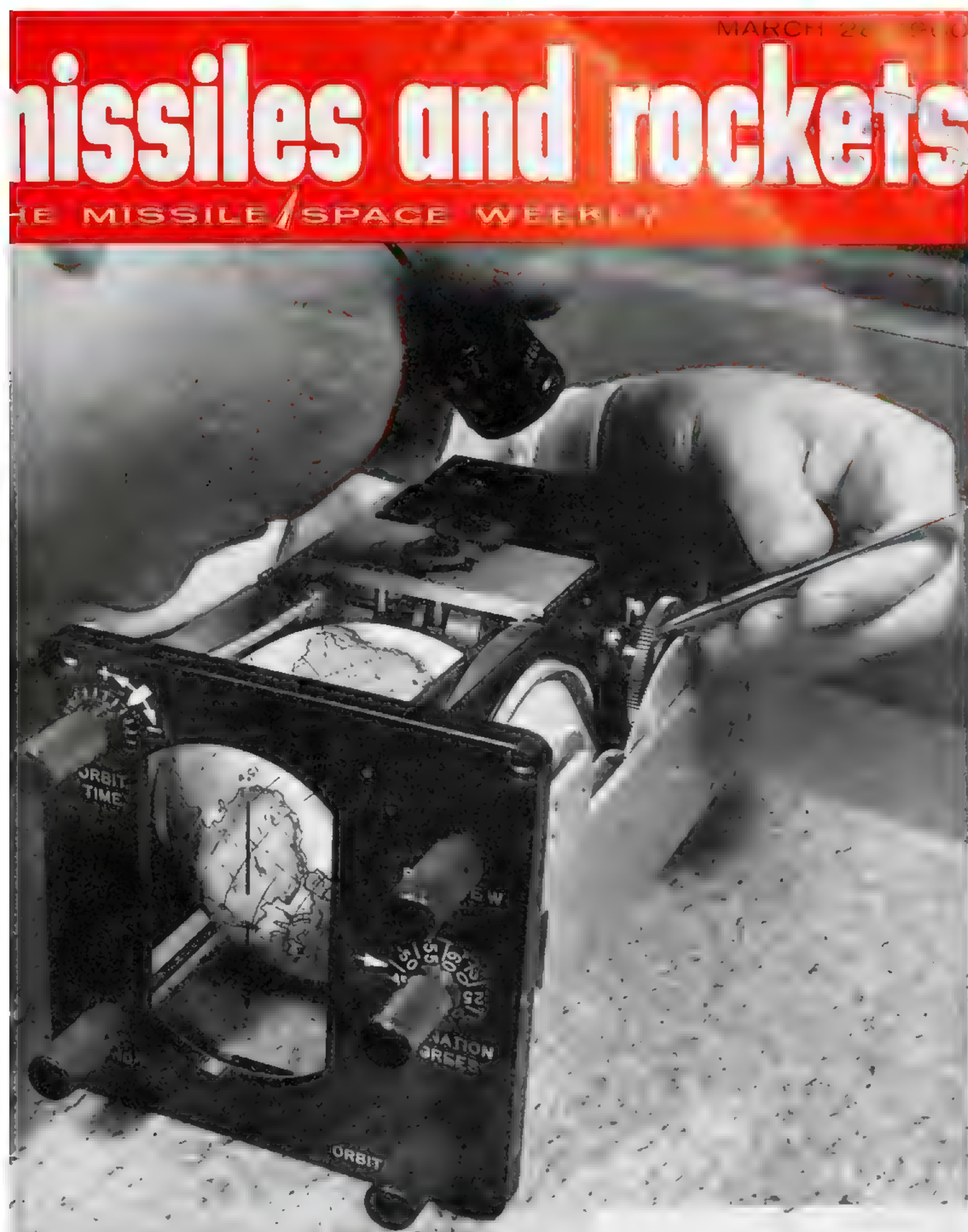
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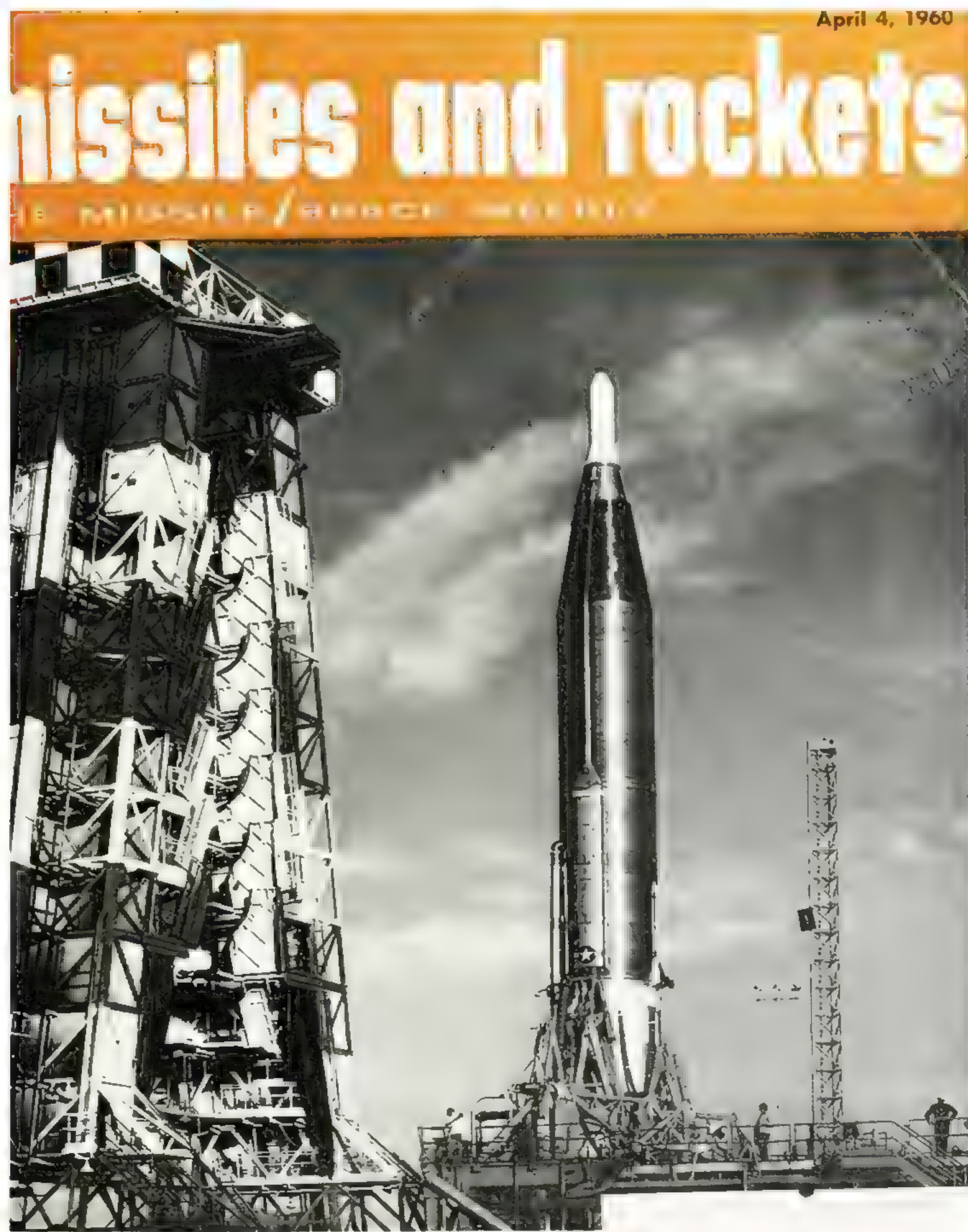
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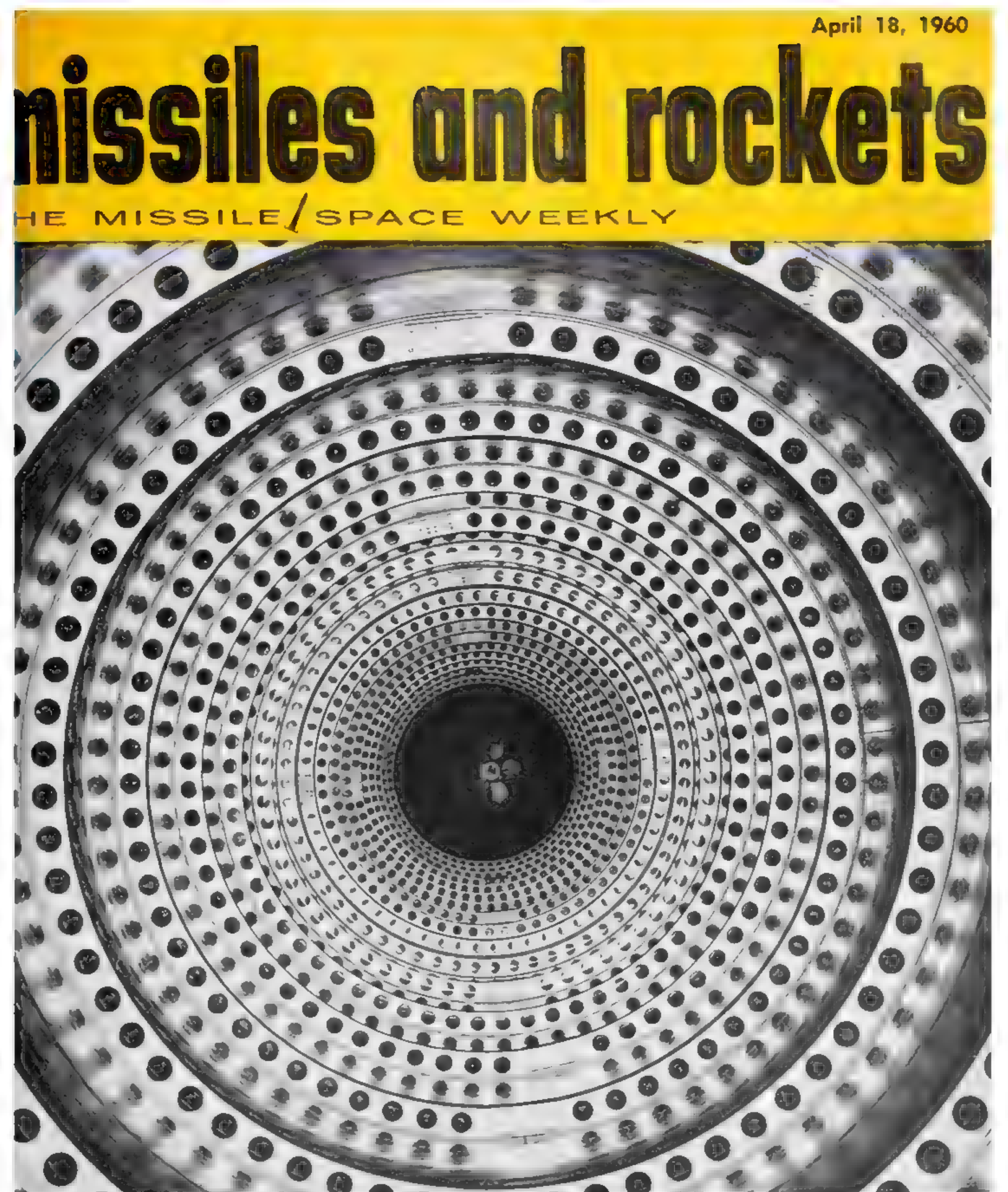


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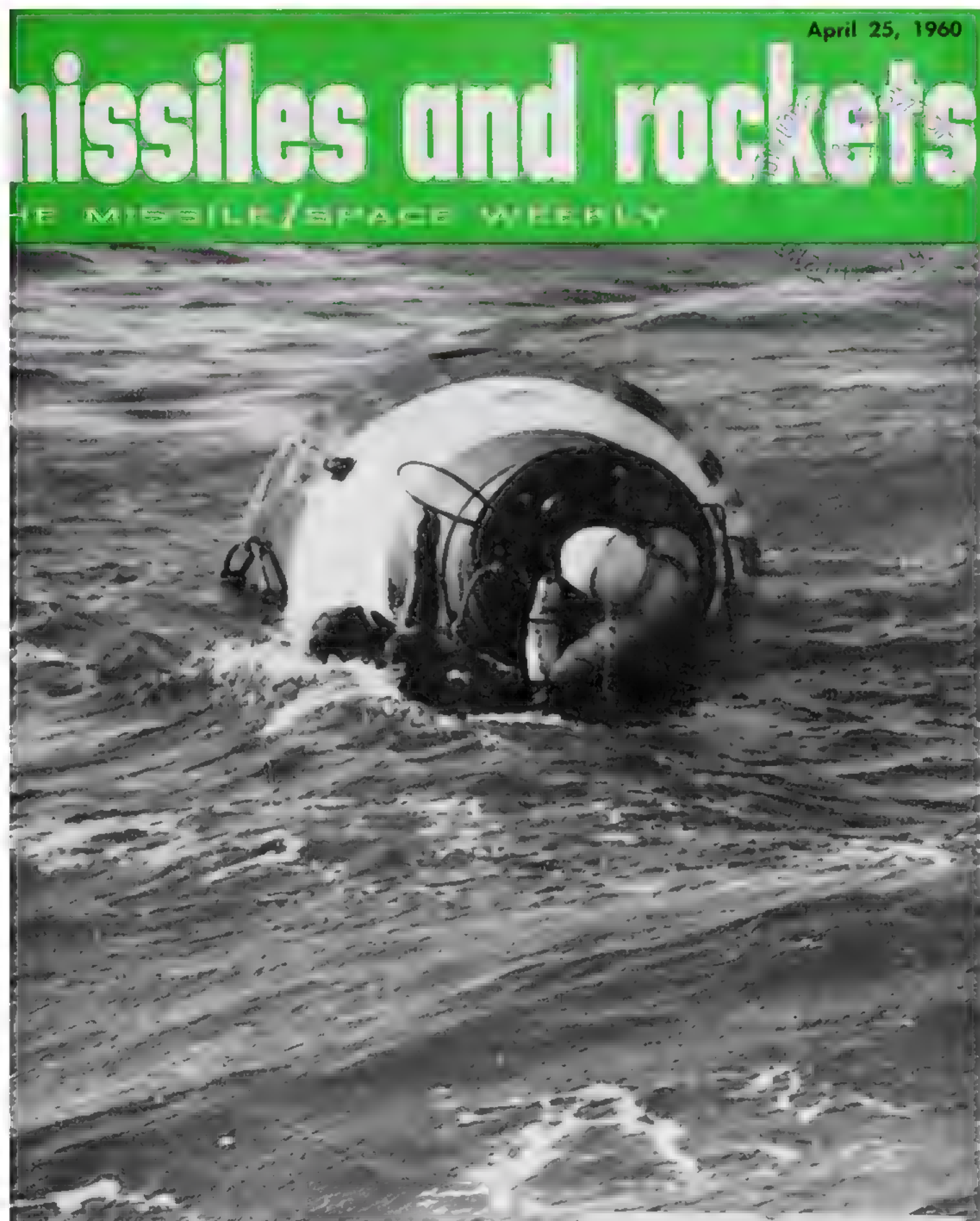
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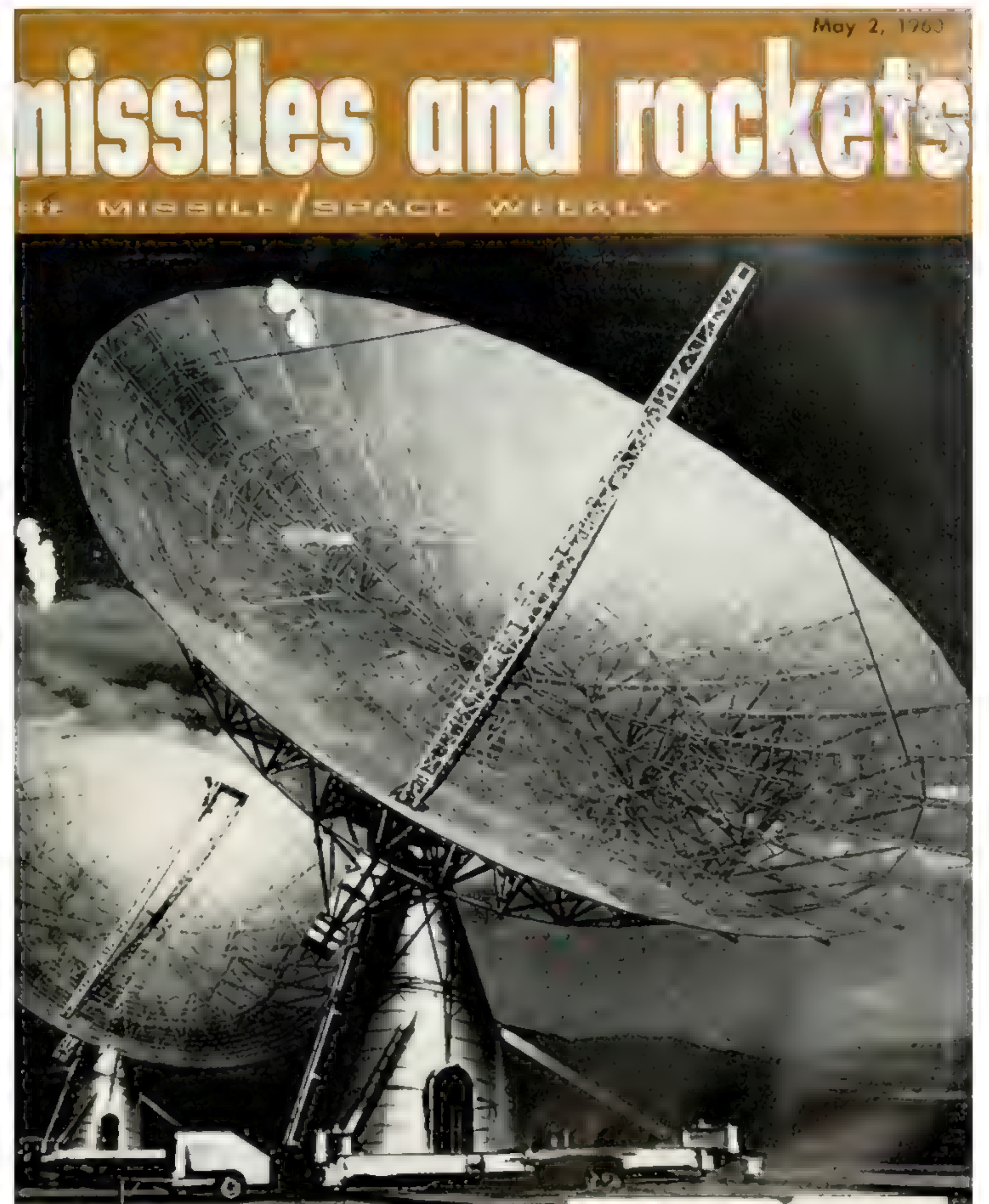
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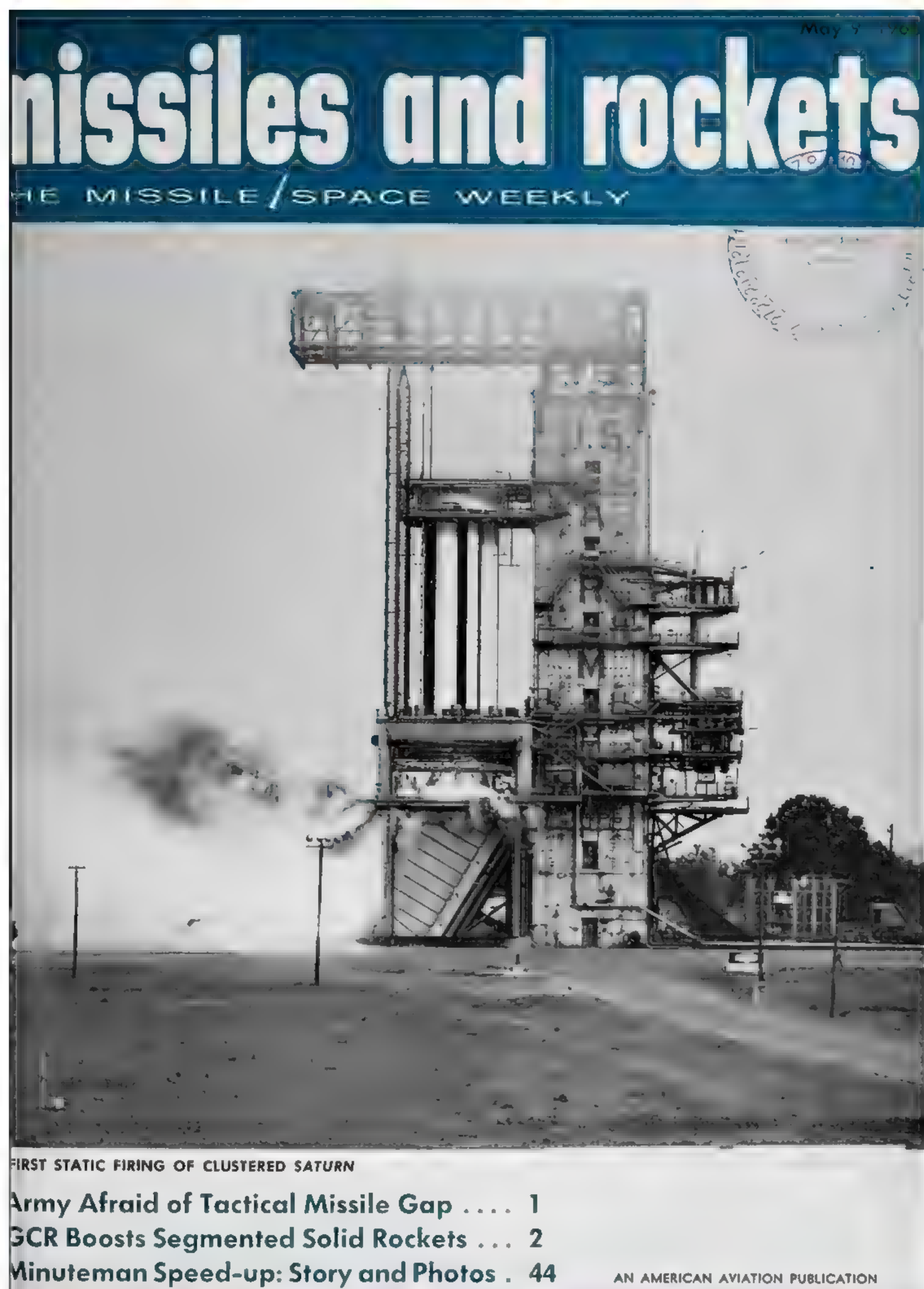
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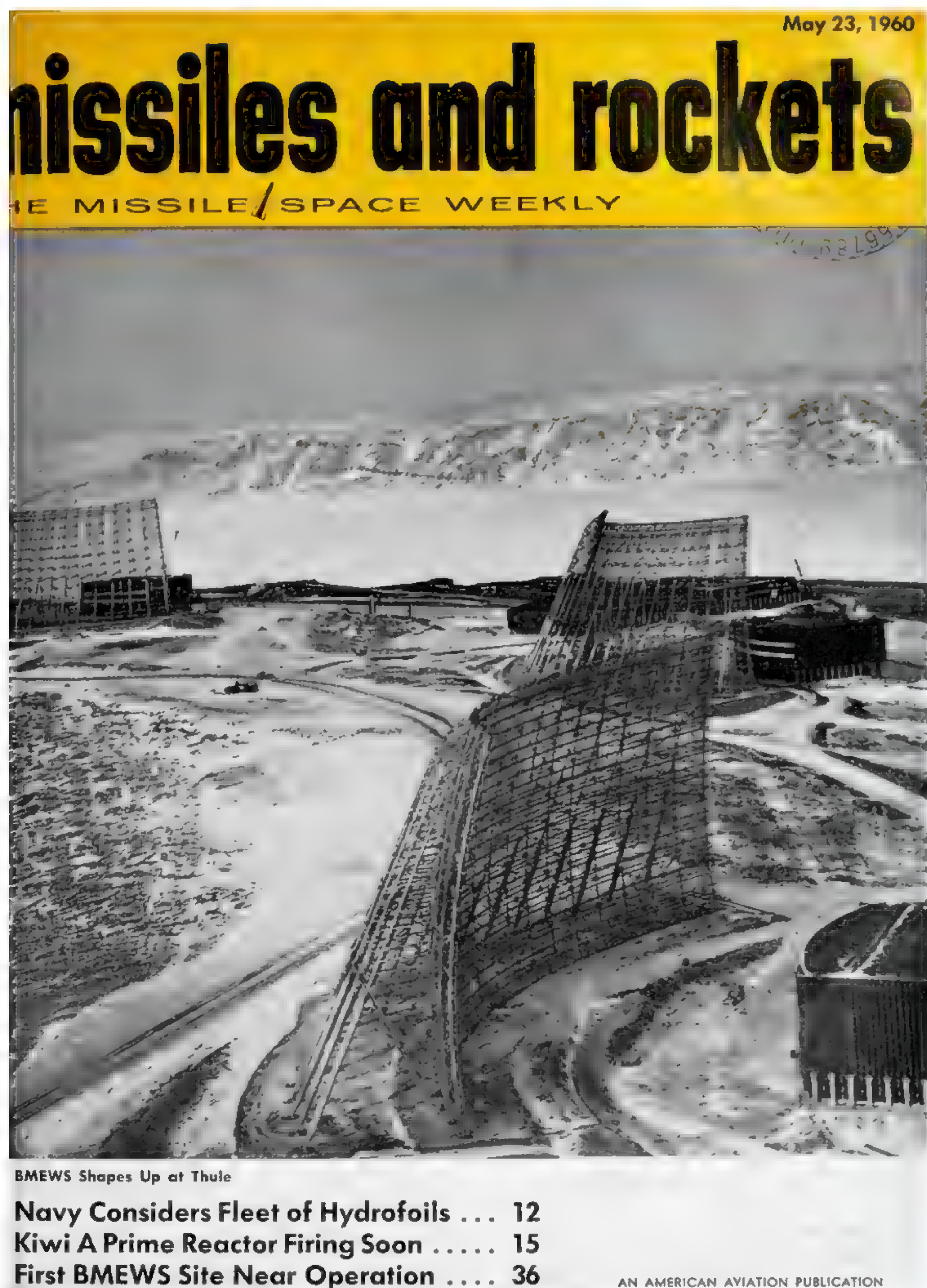
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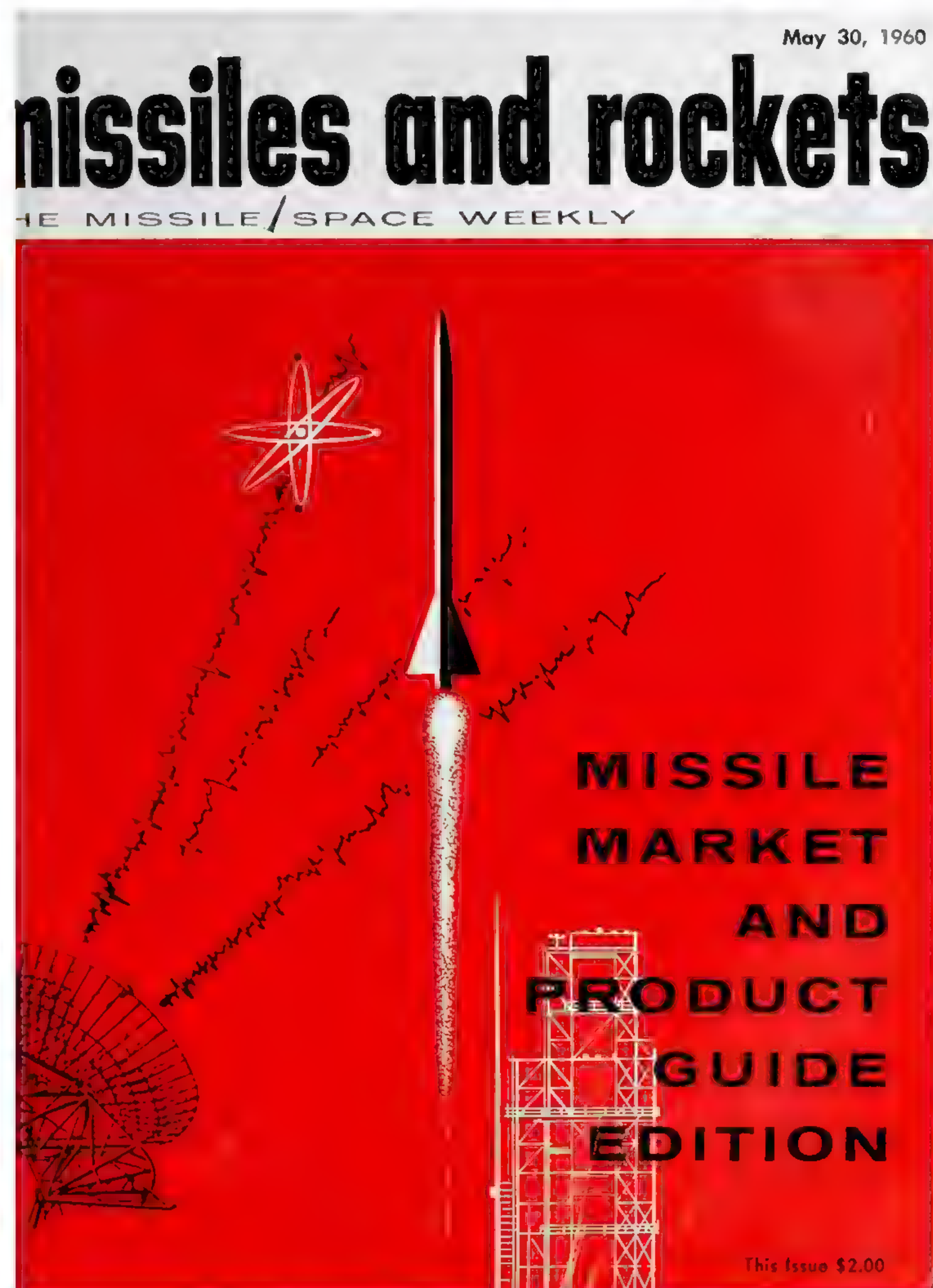
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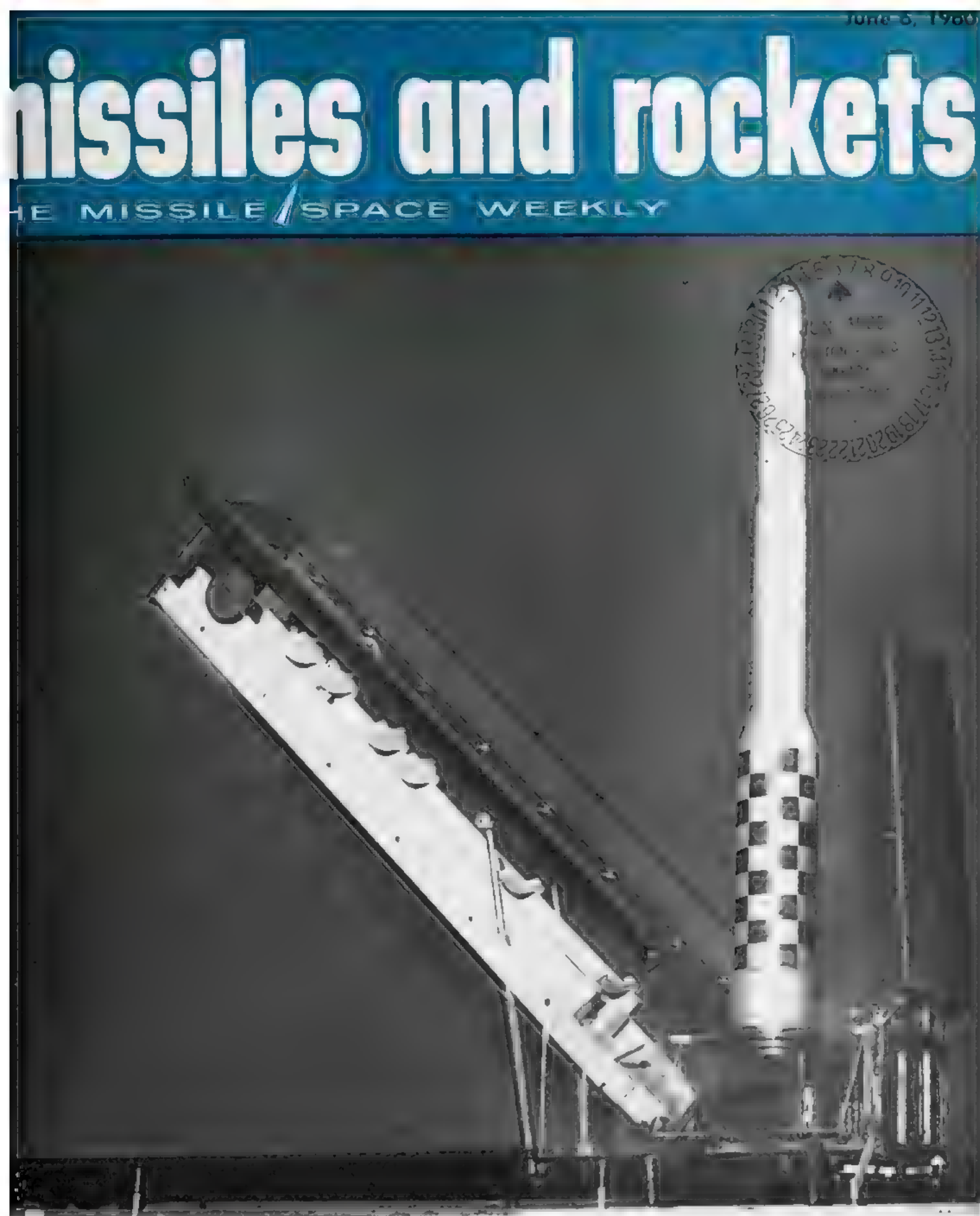
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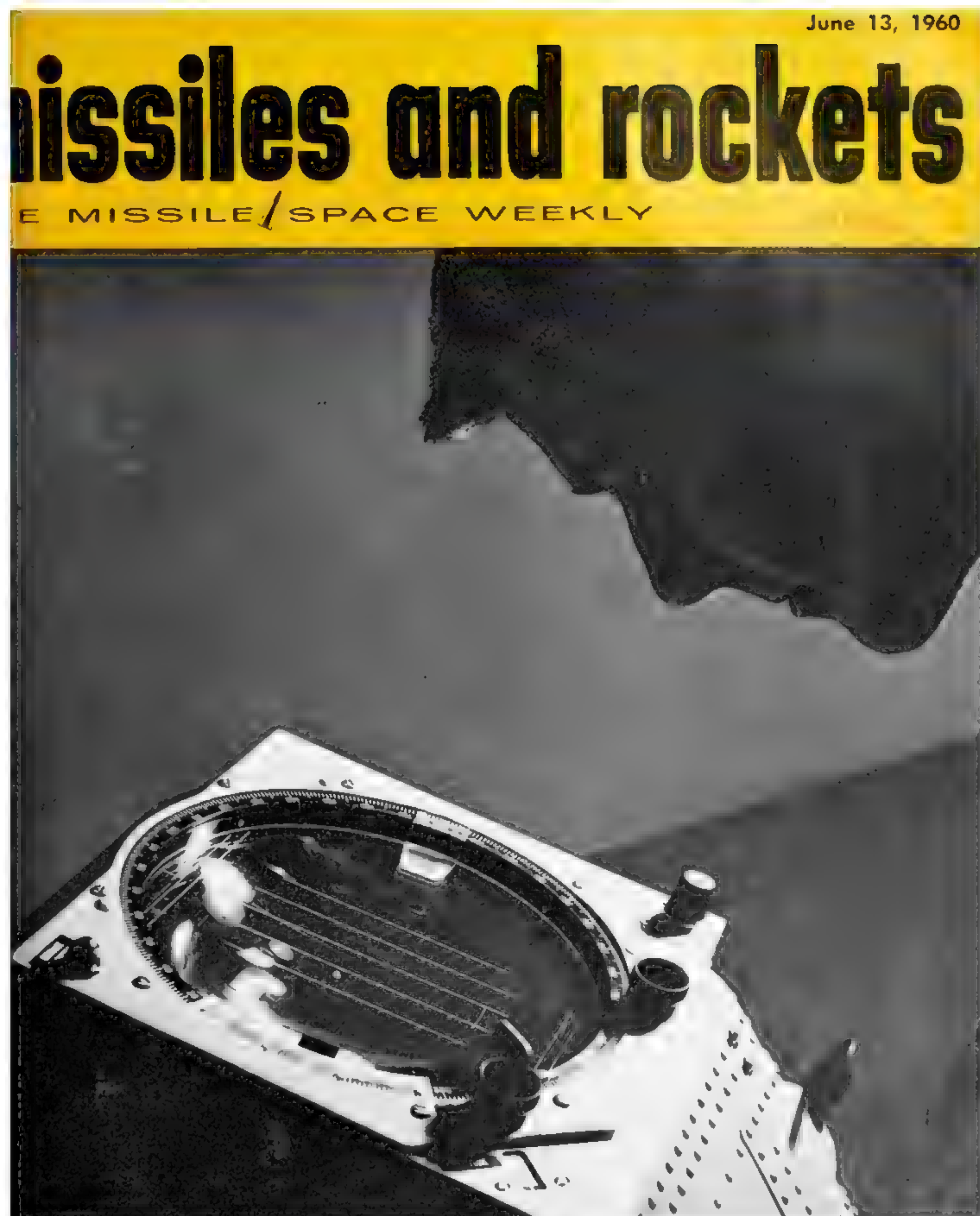
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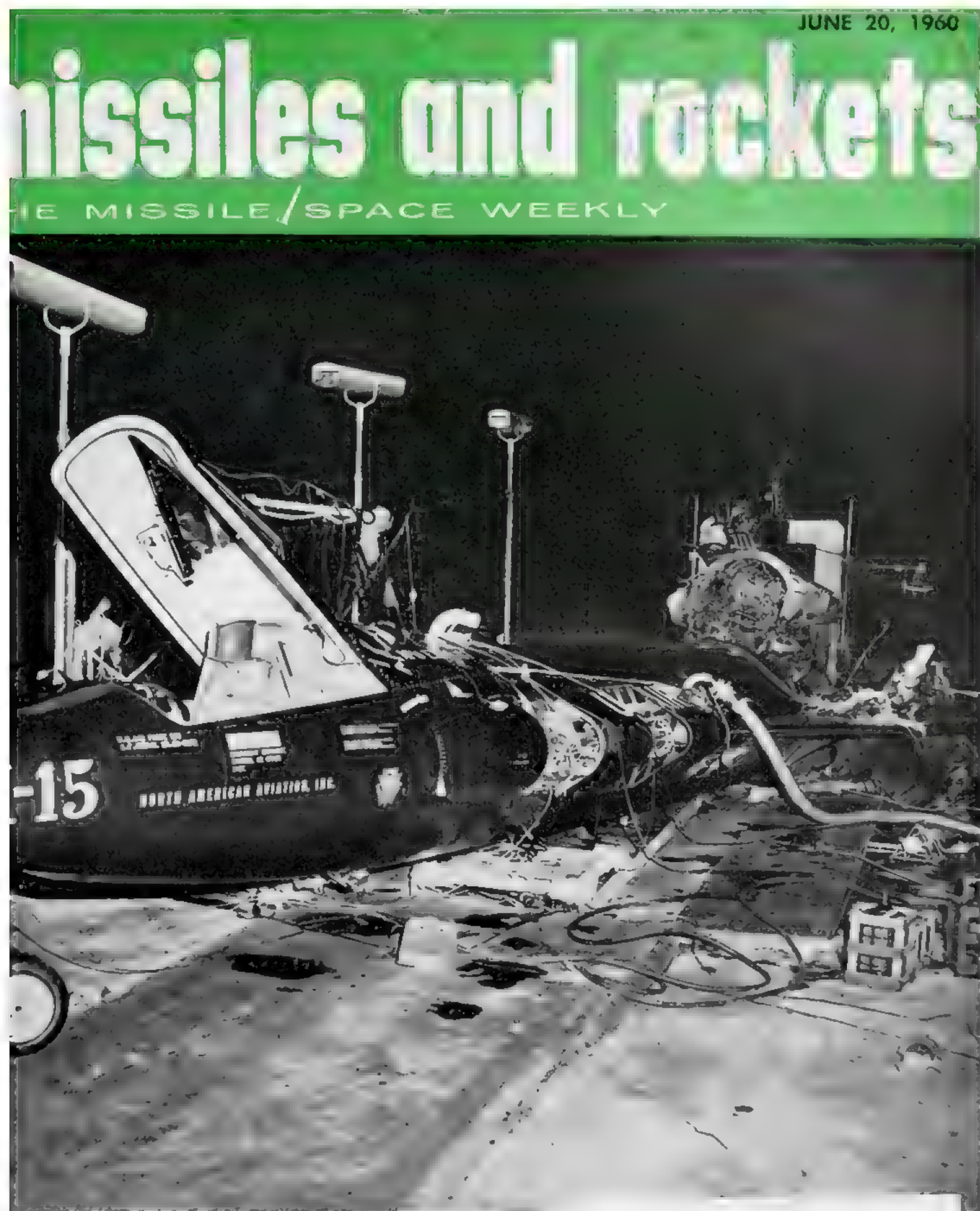
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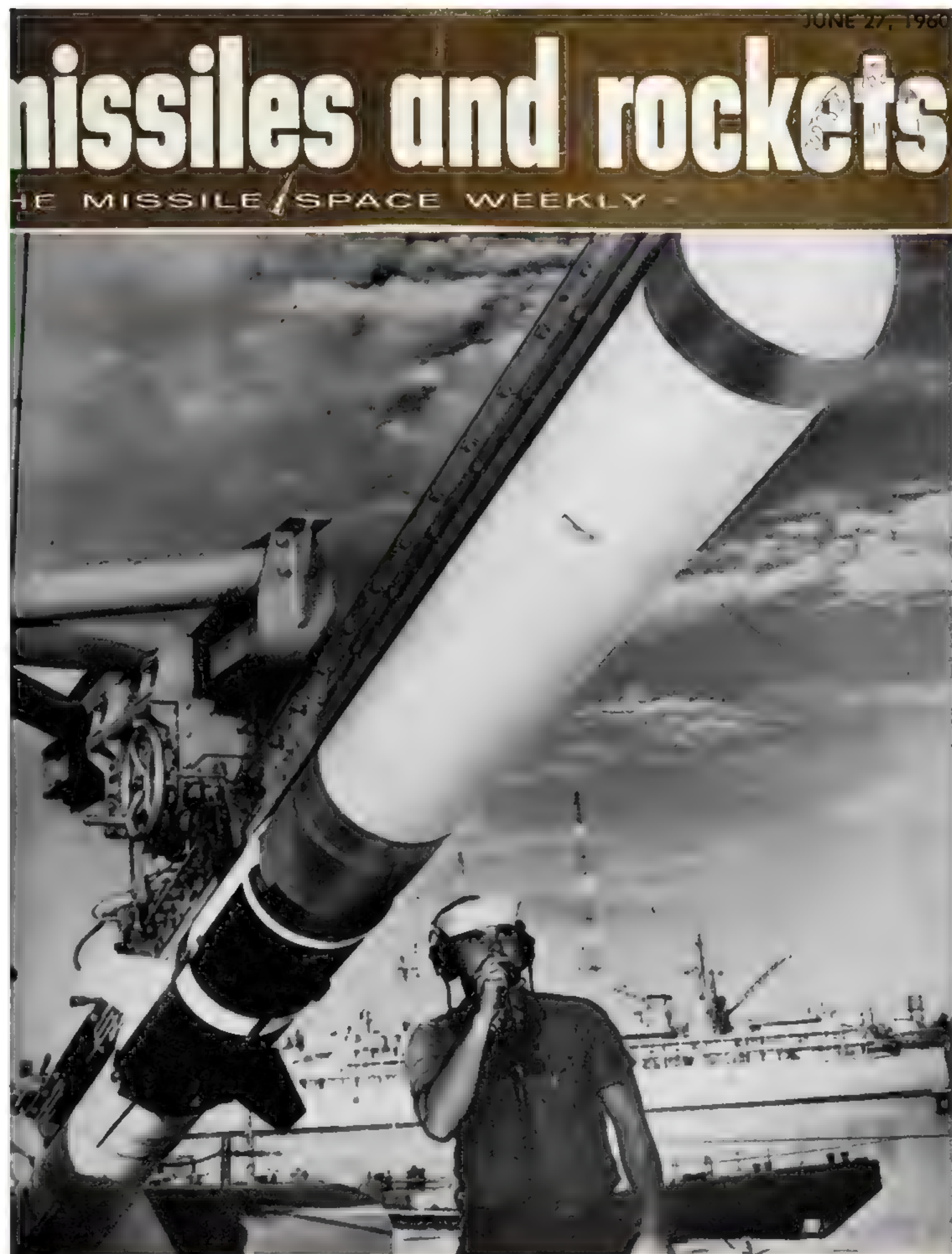
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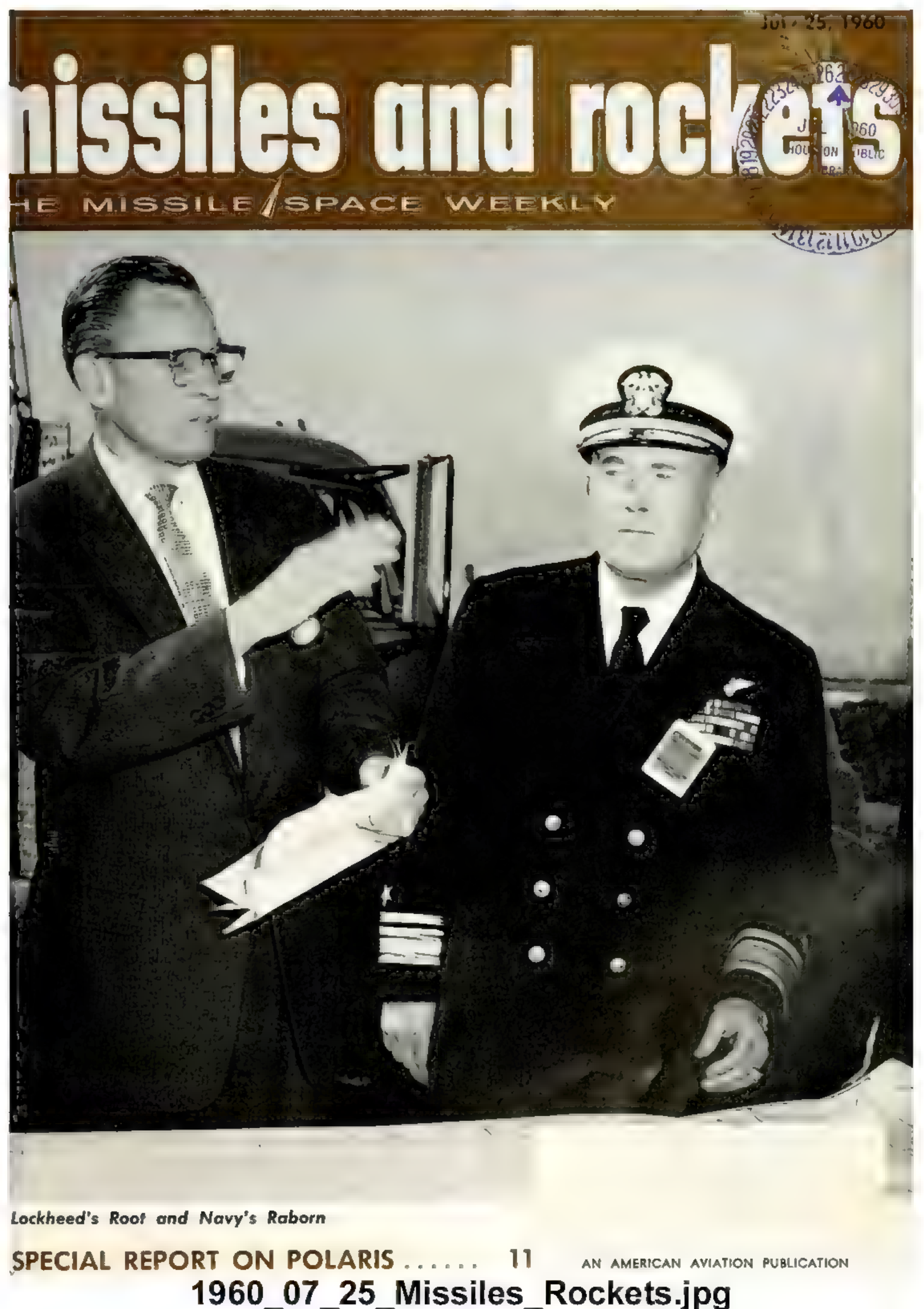
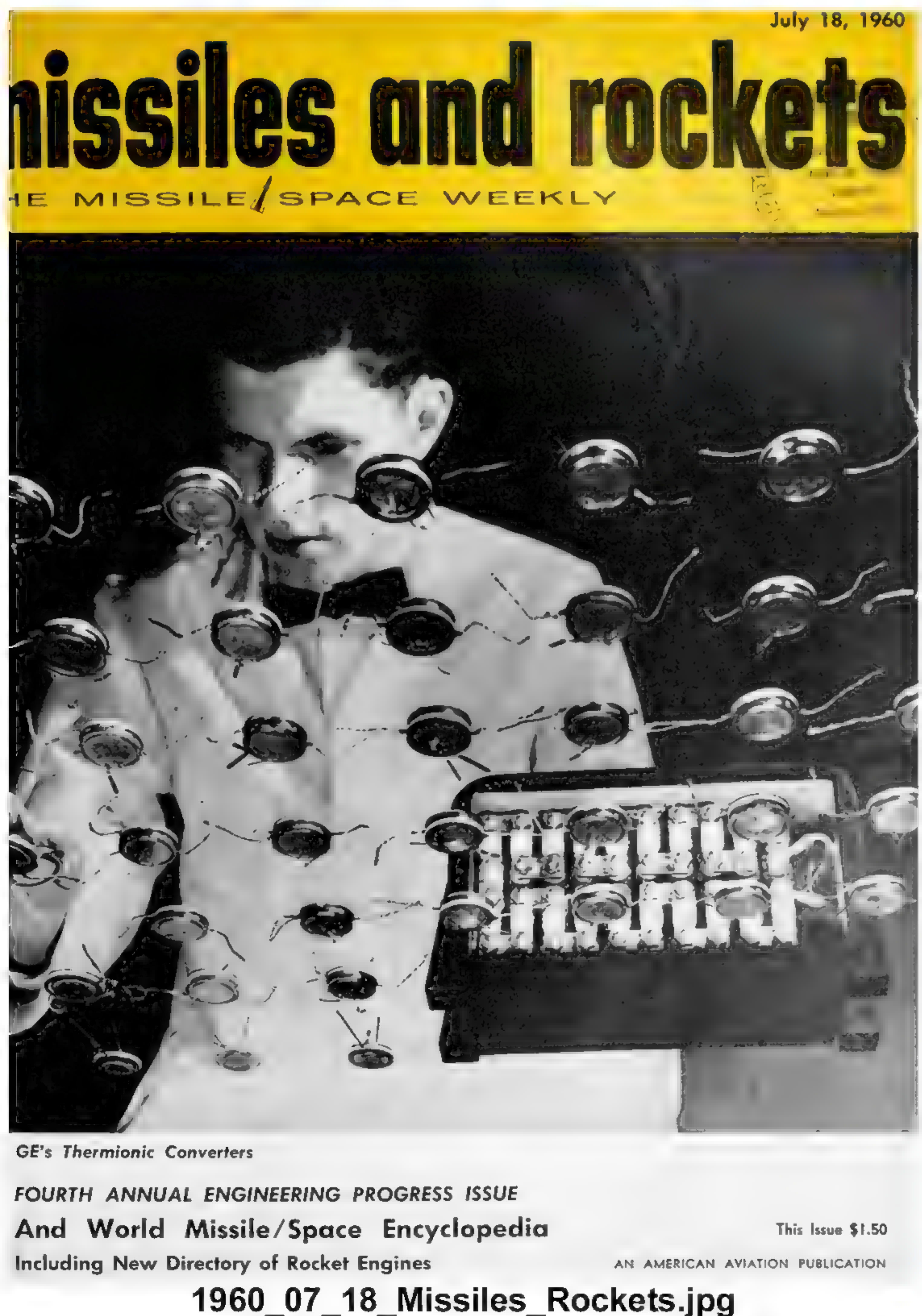
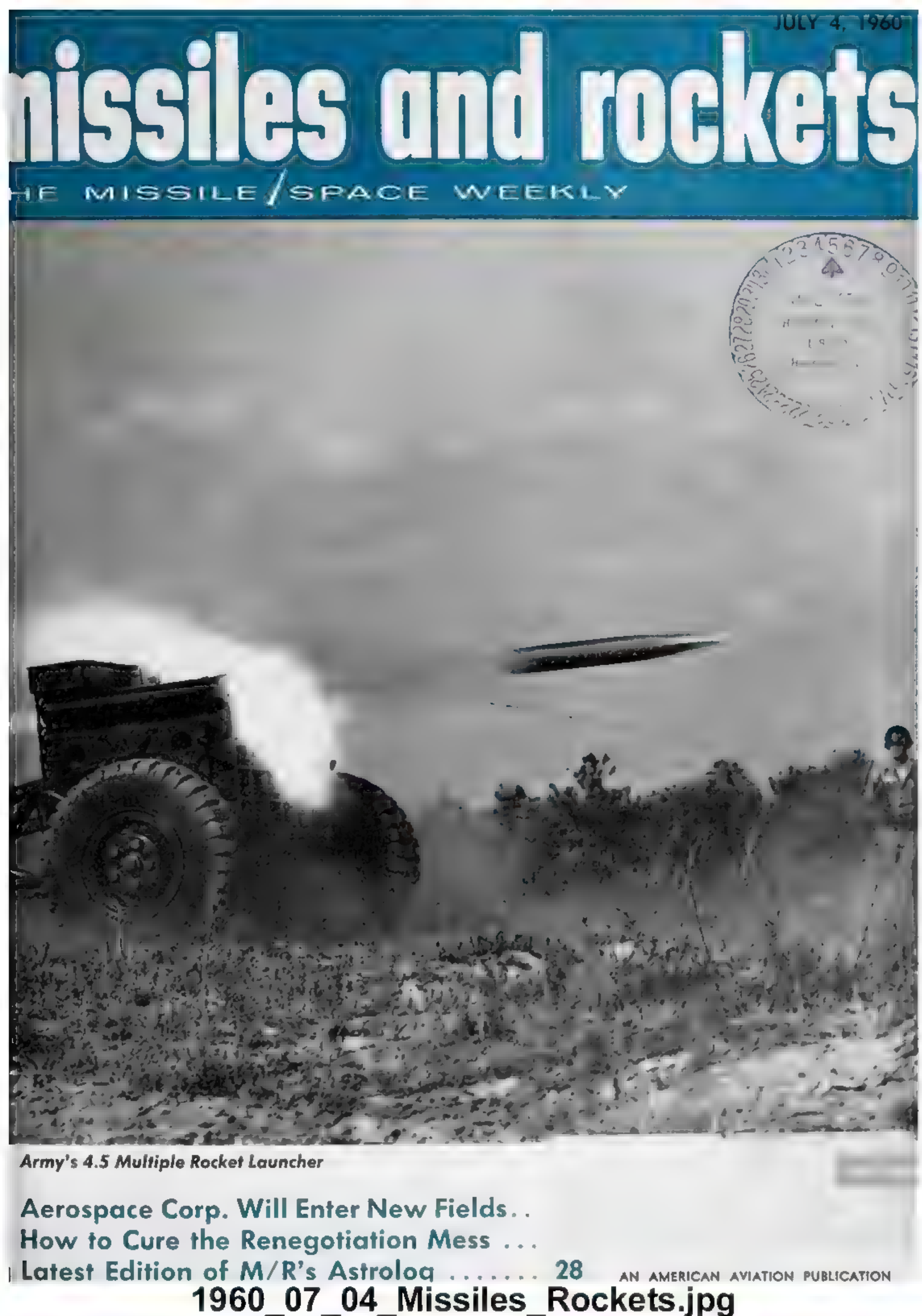


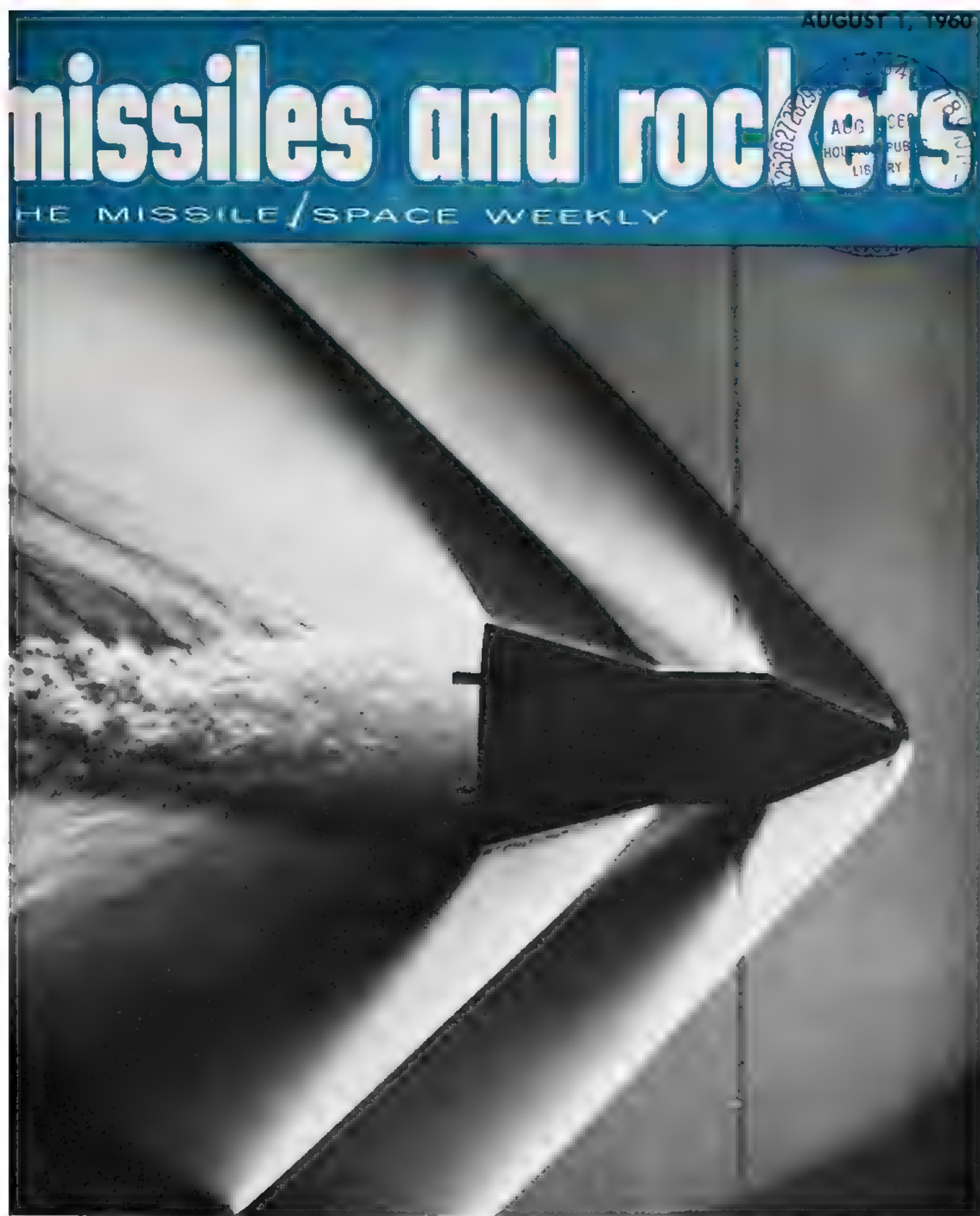
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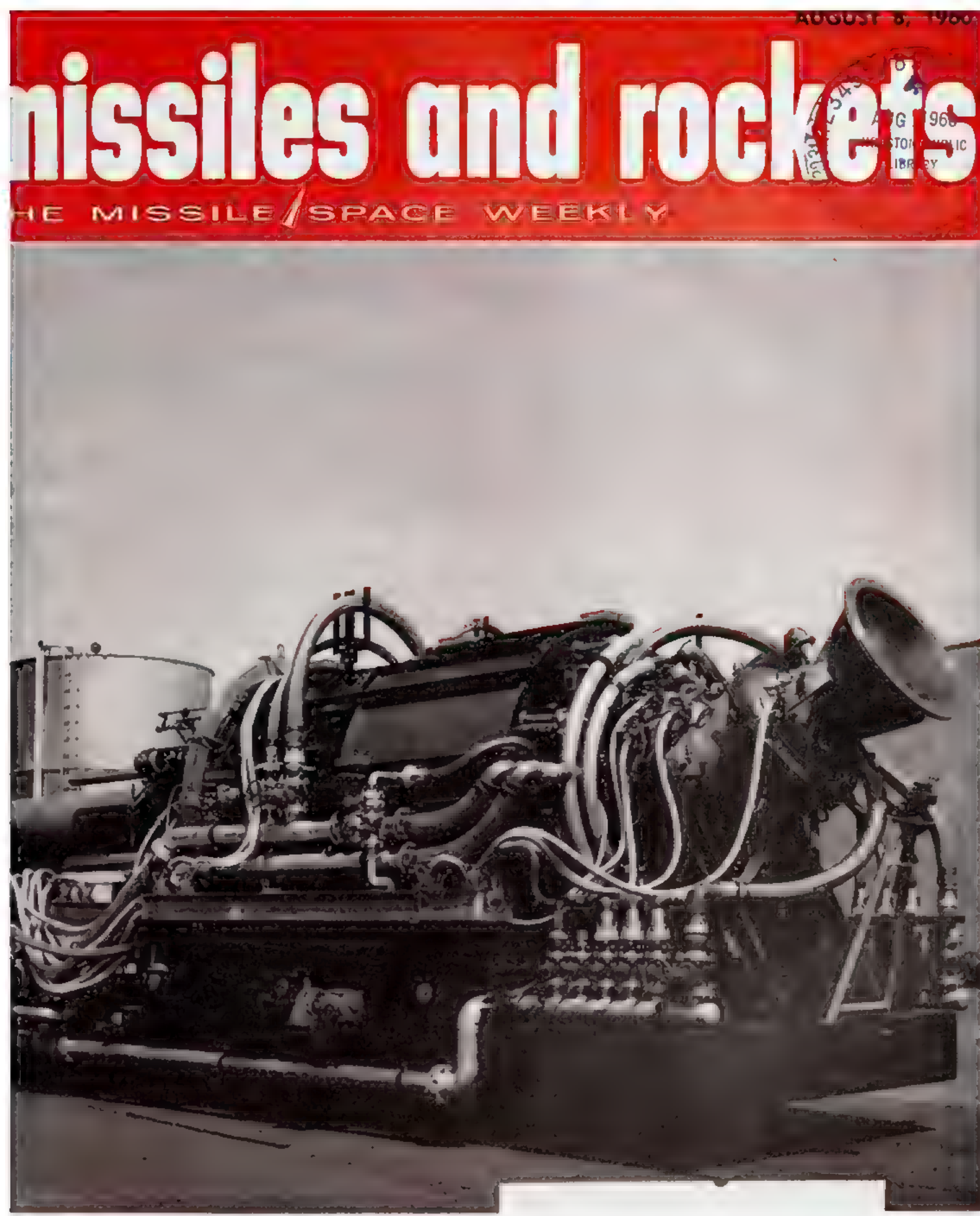
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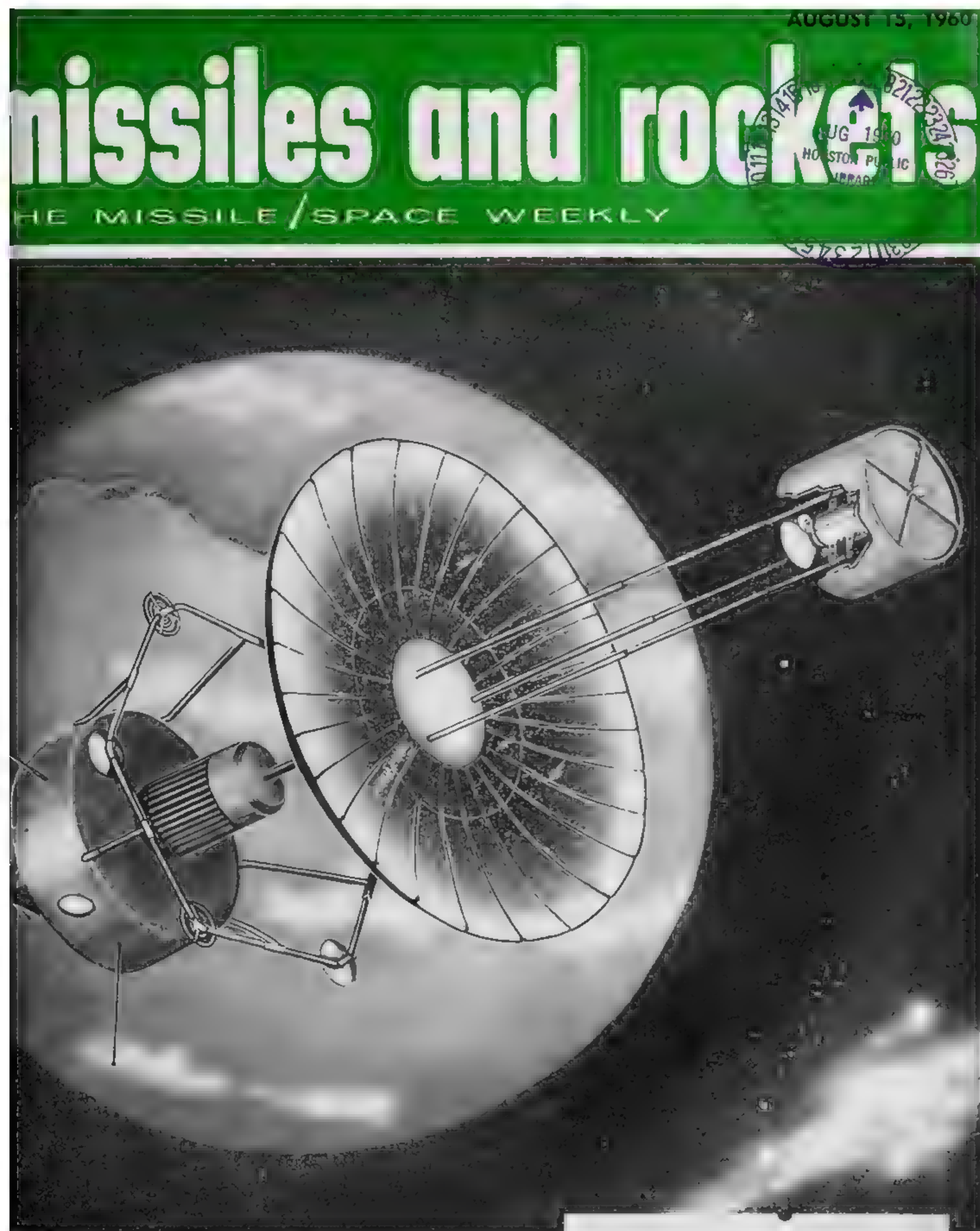
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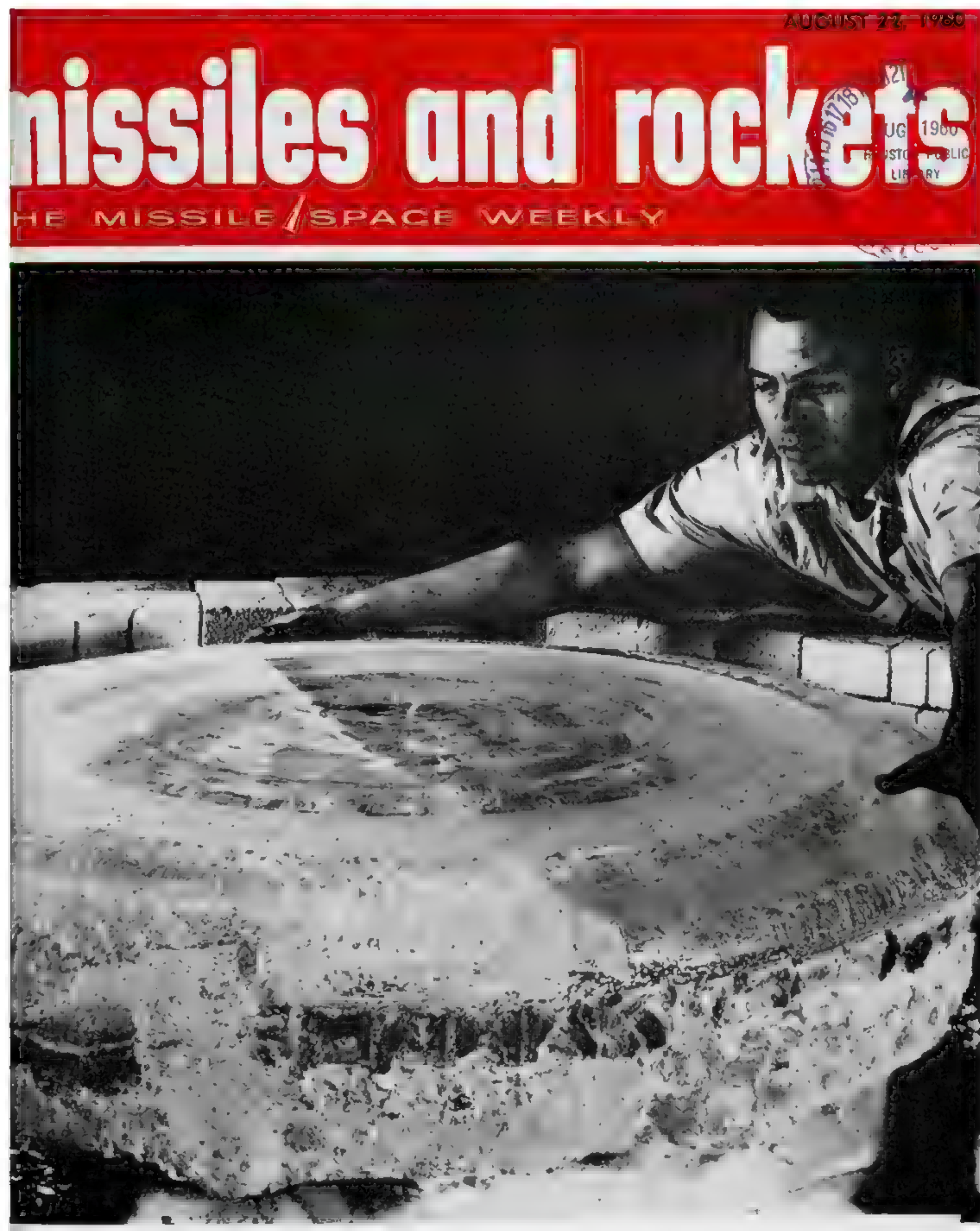
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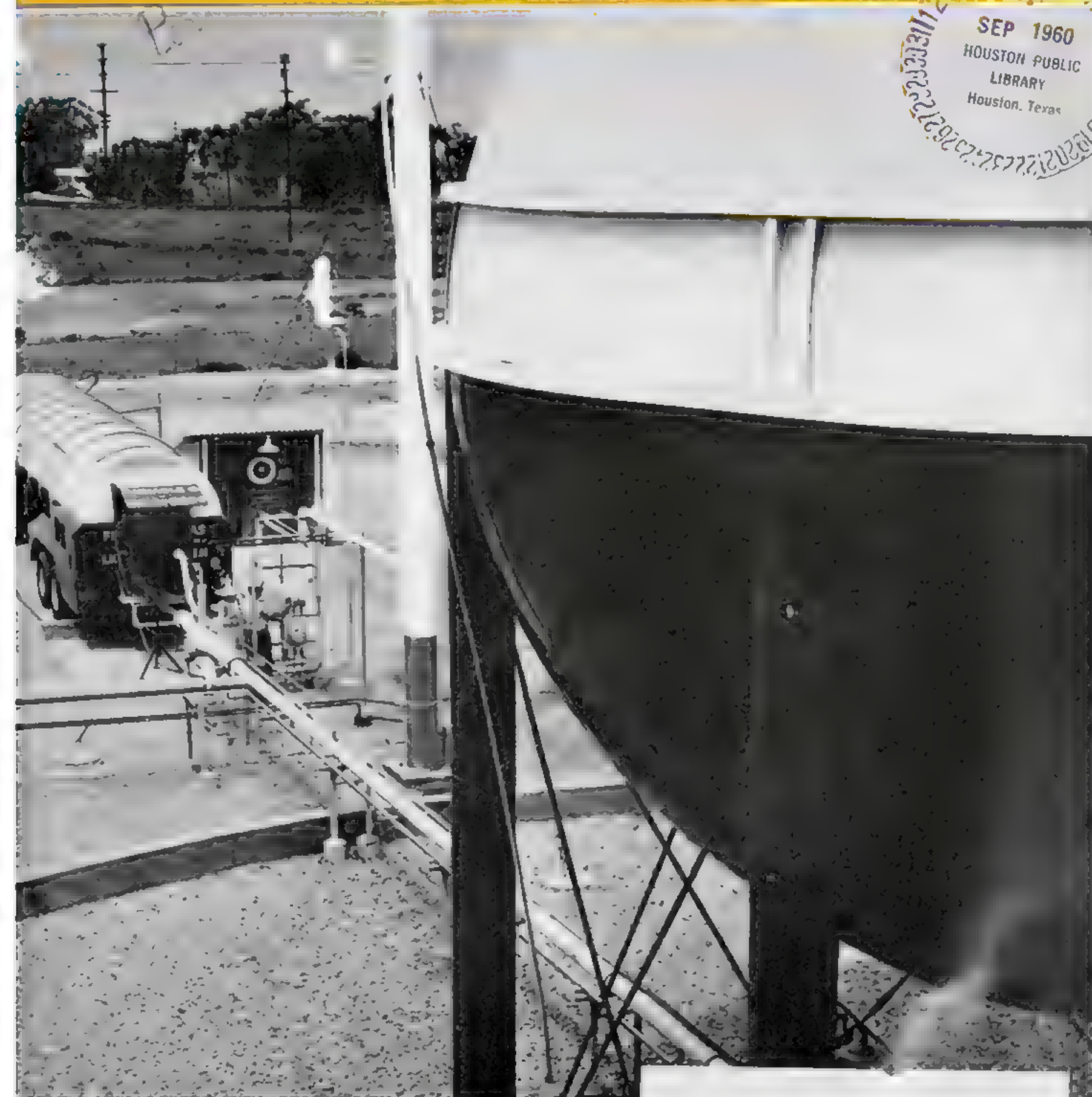
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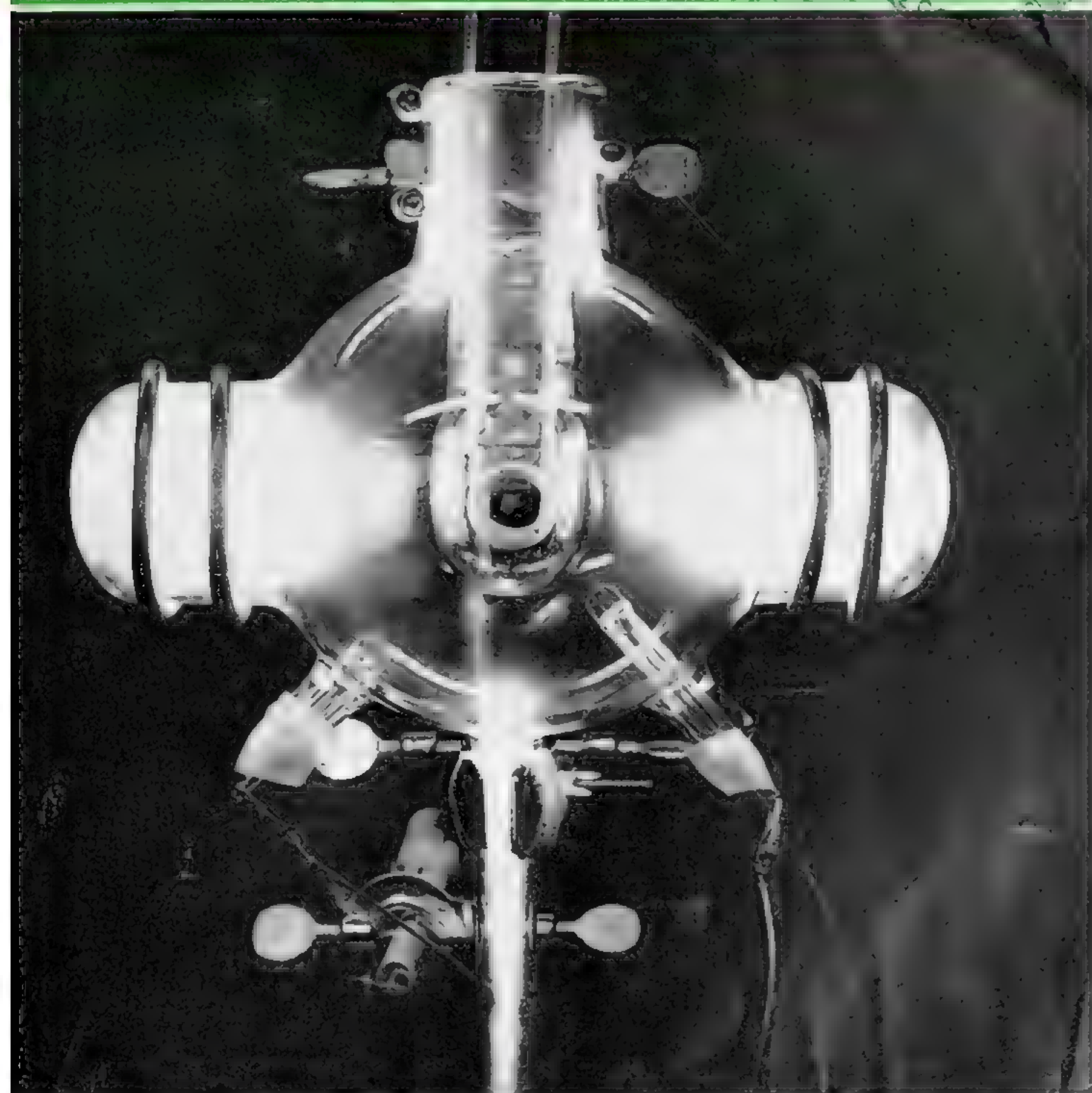
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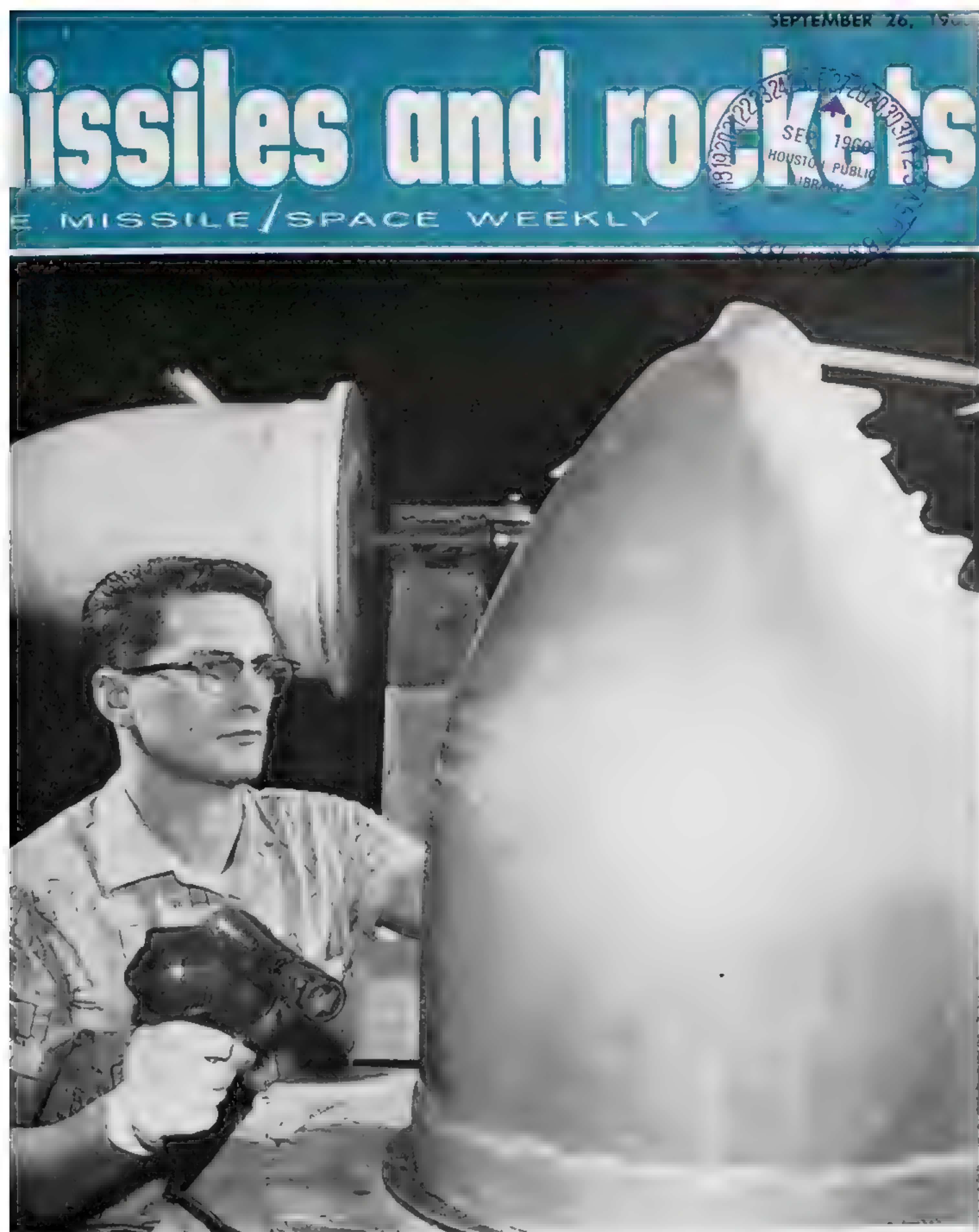


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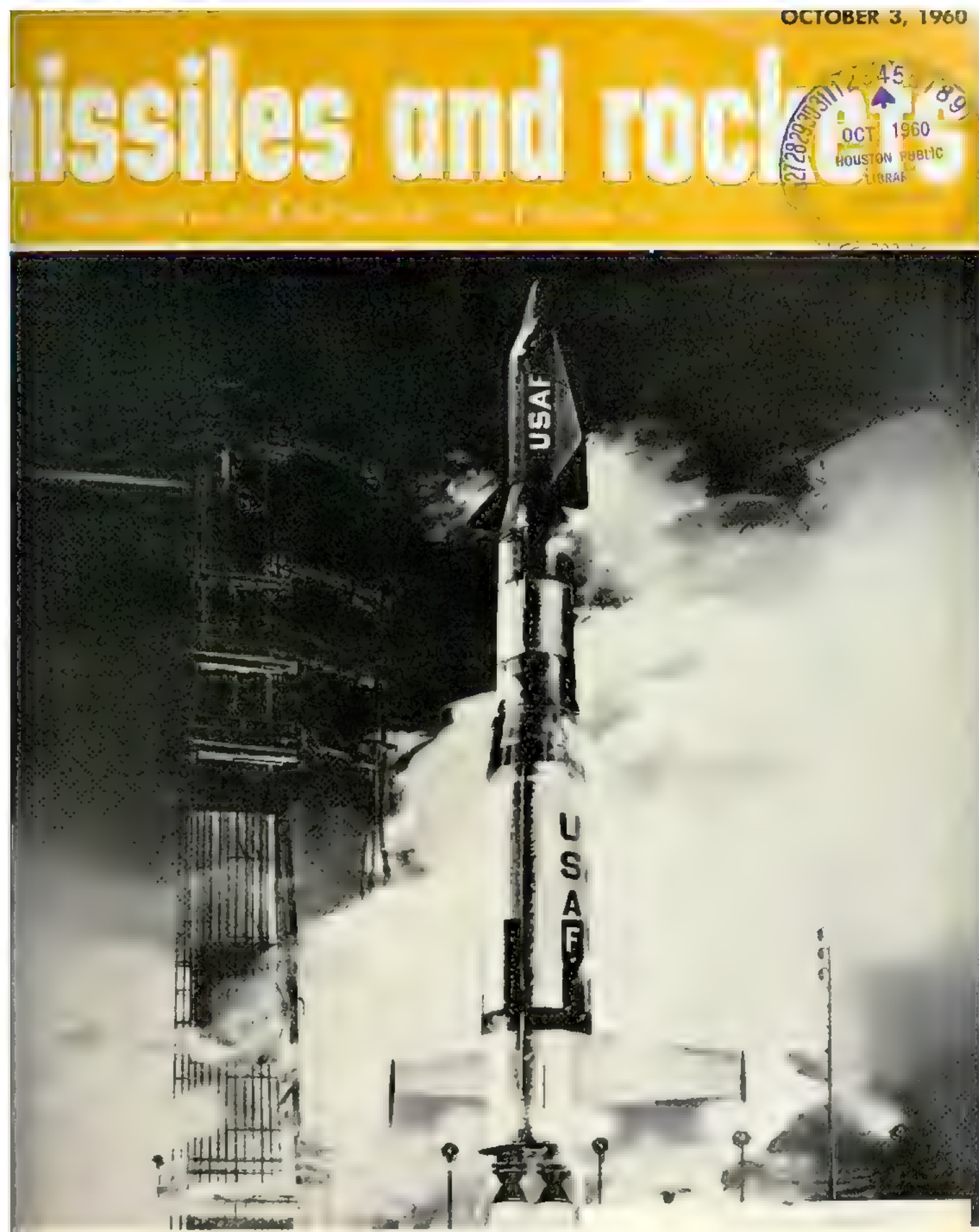
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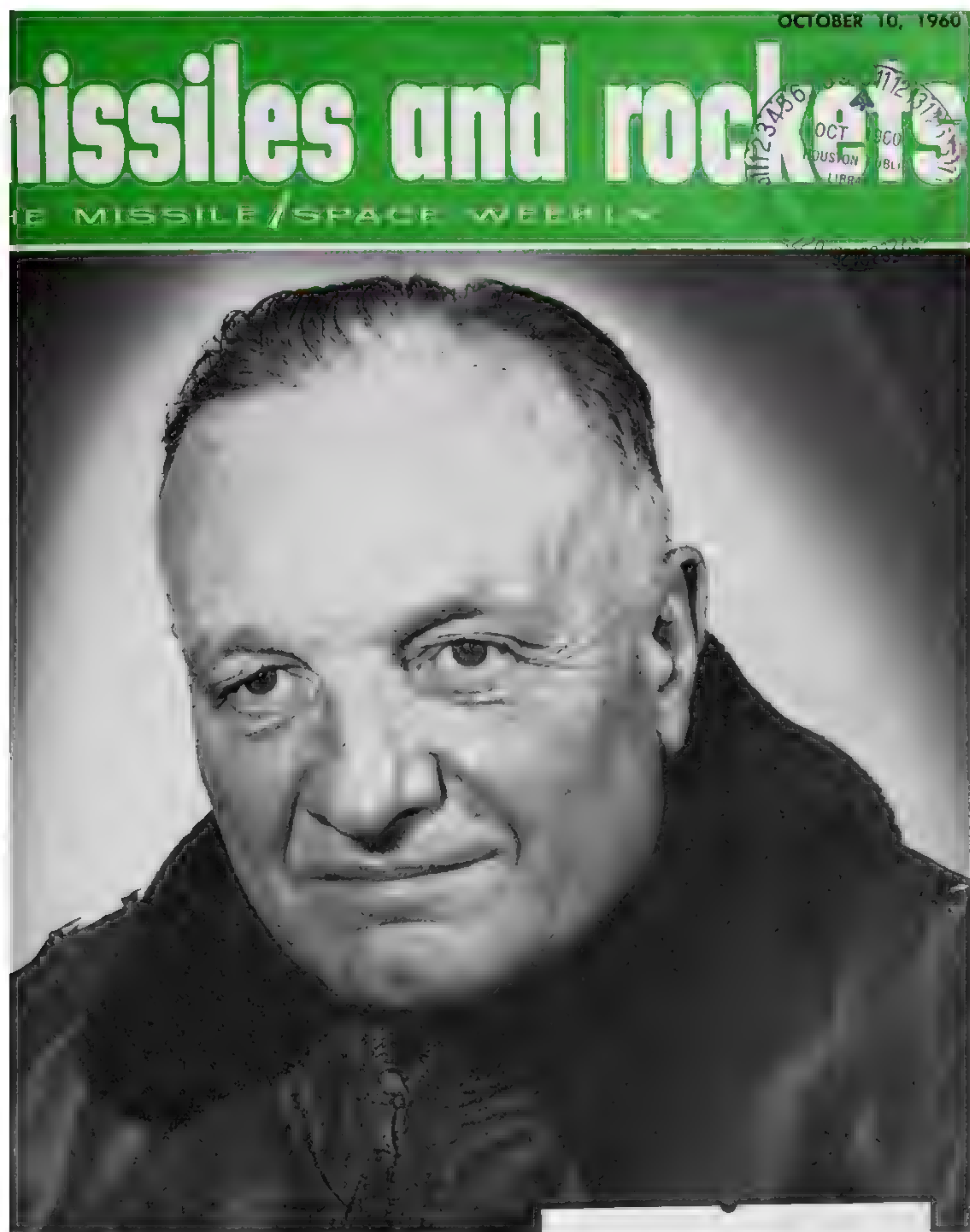
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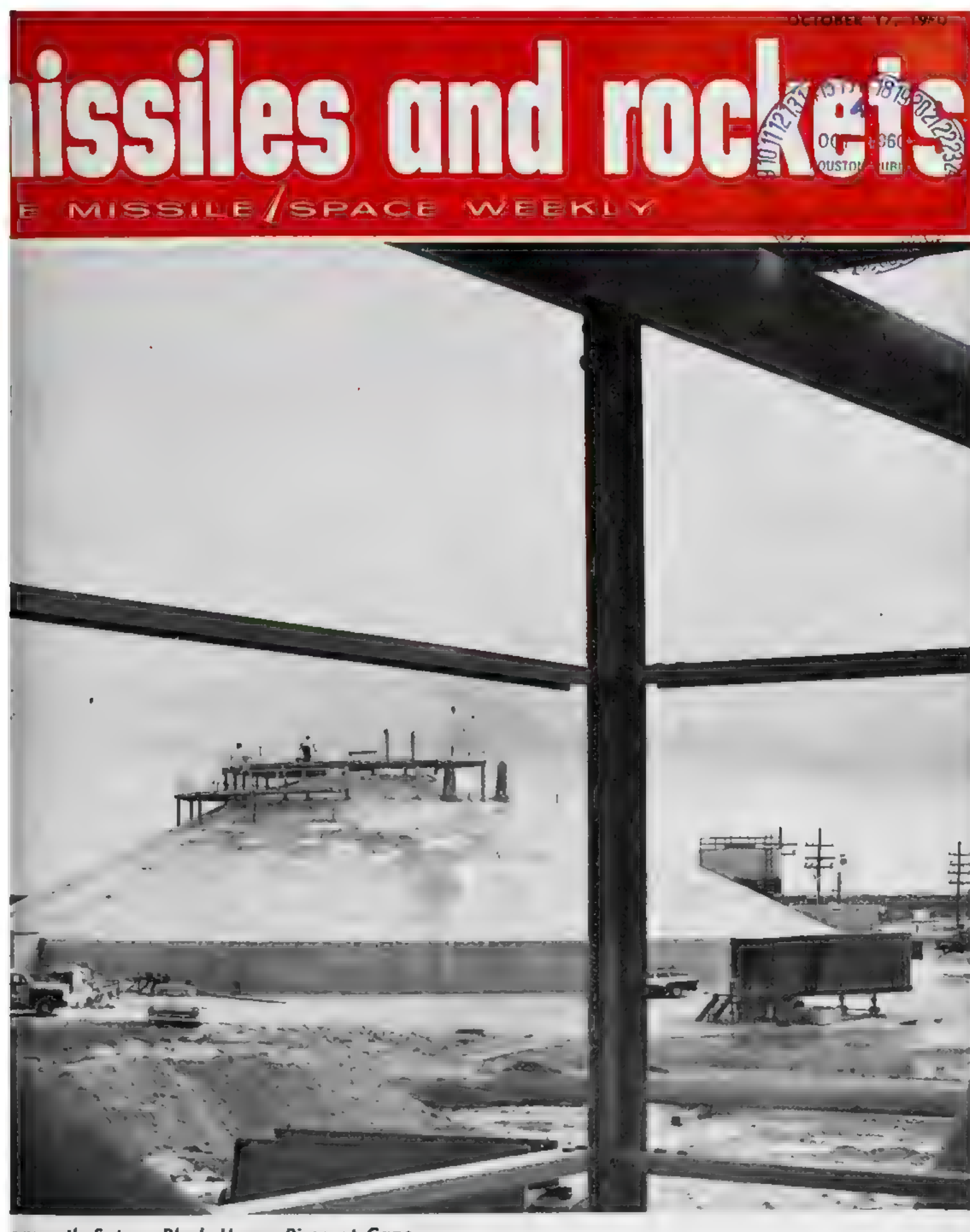
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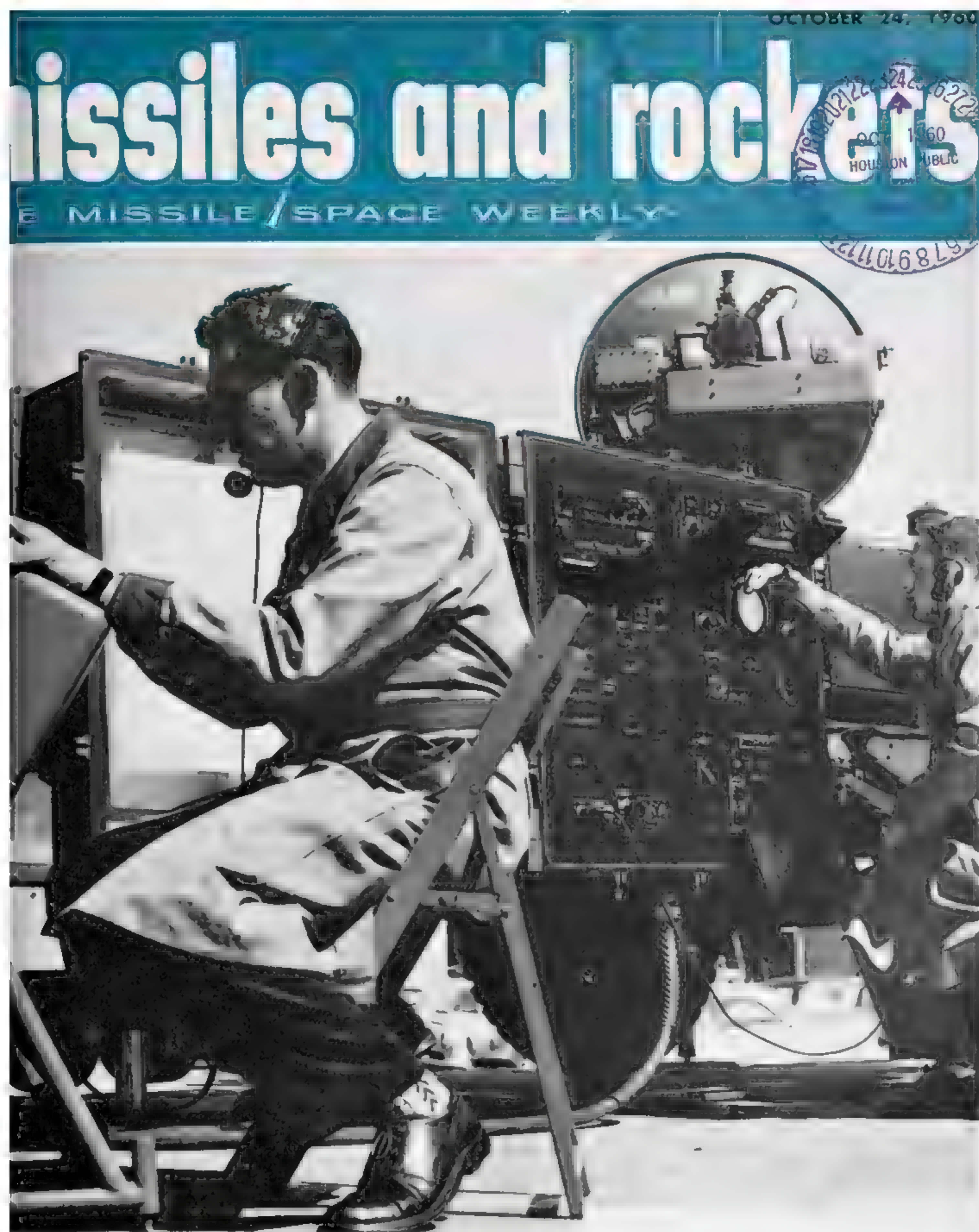
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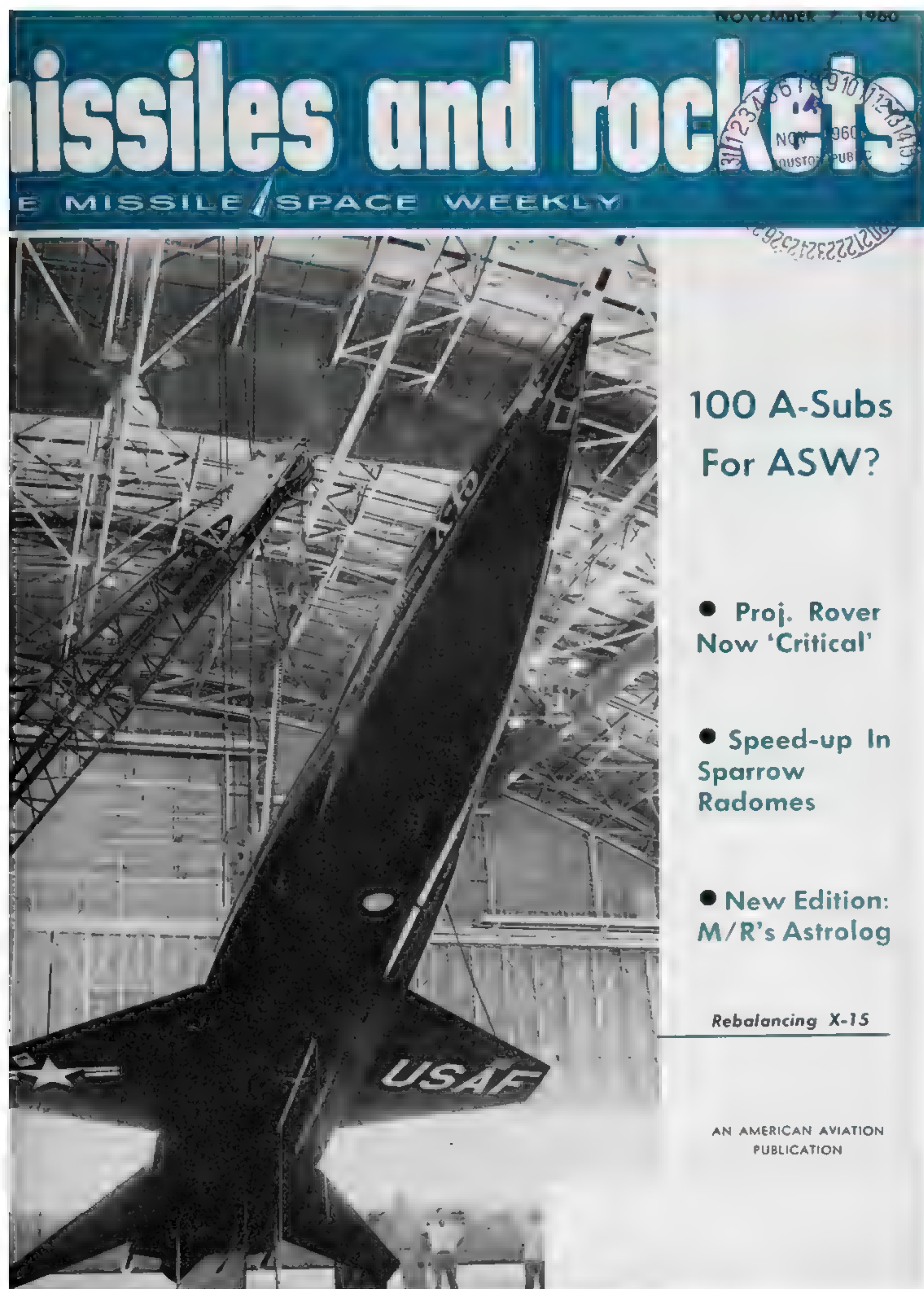
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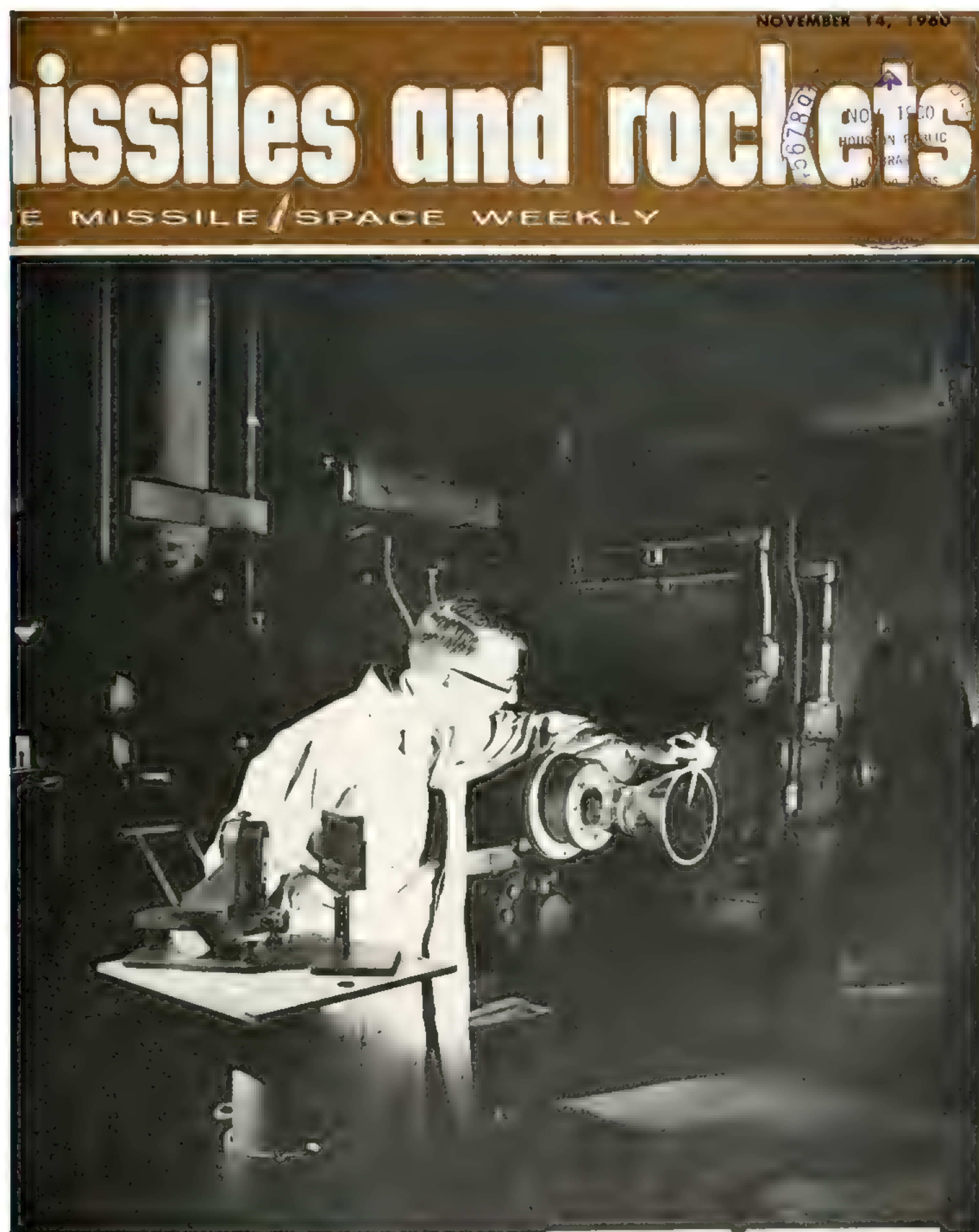
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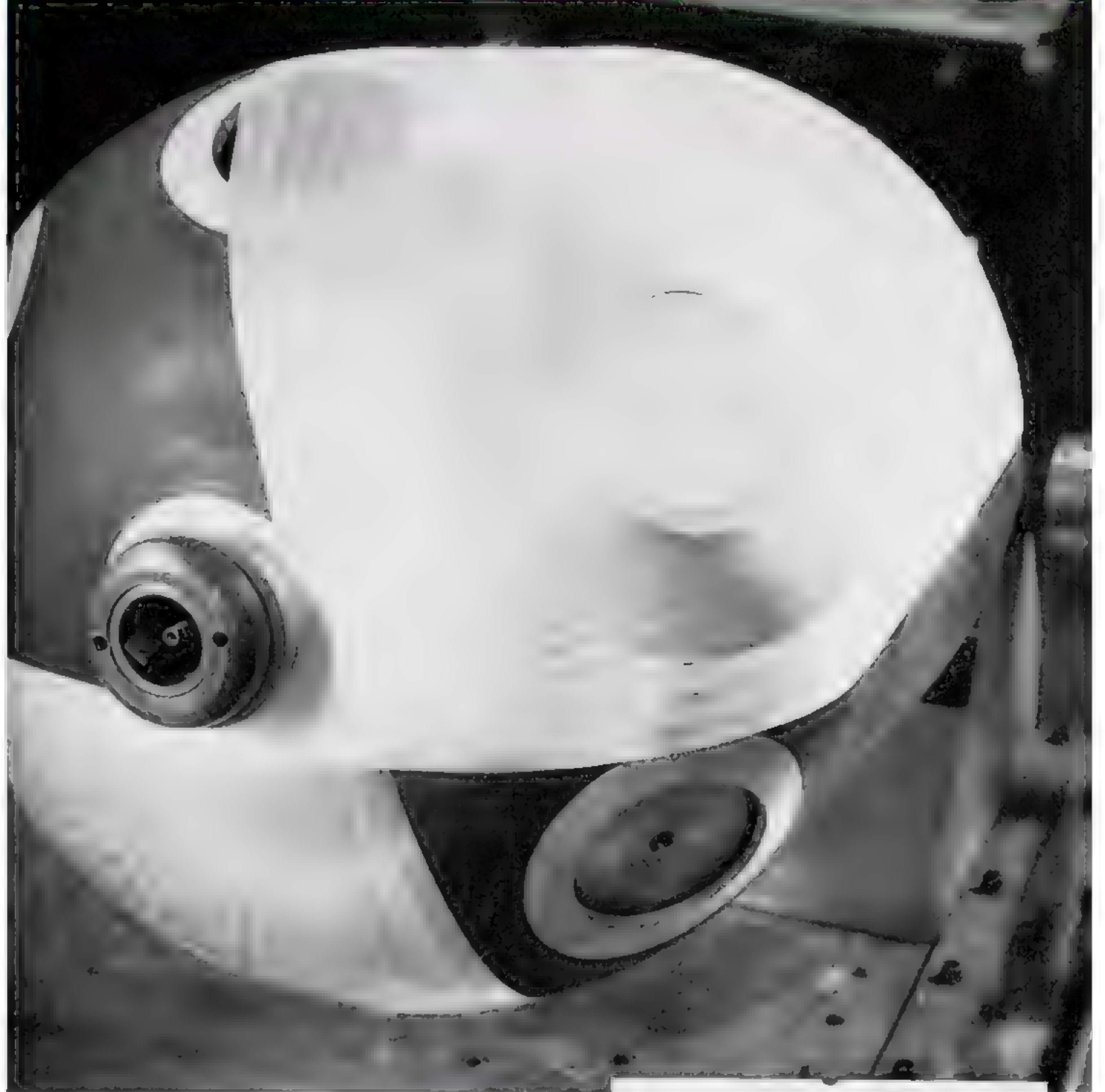
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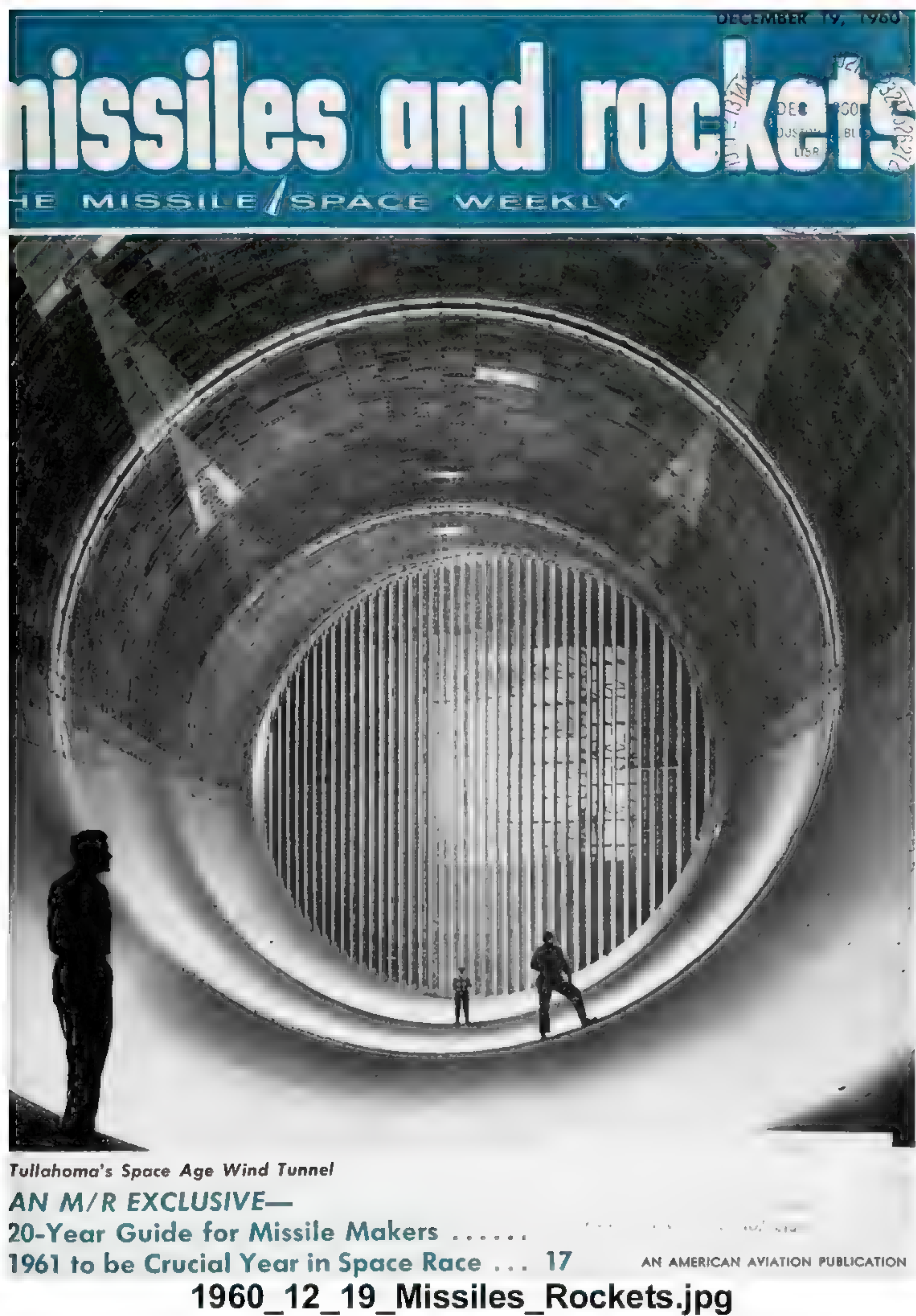
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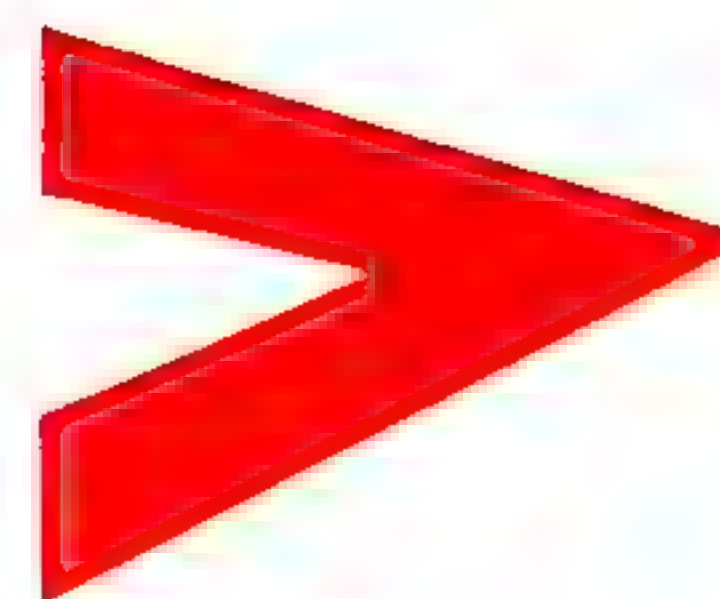
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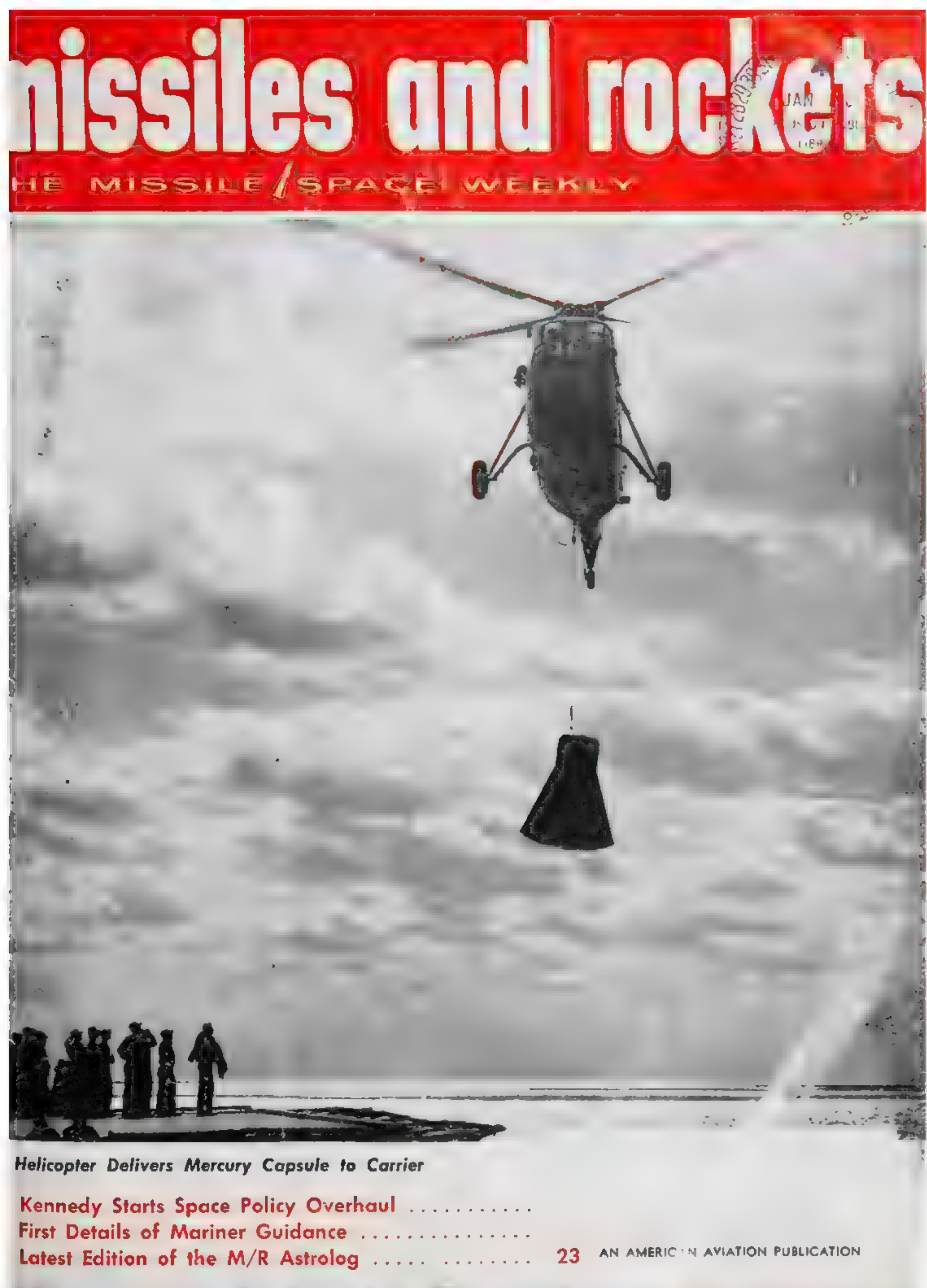


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1961

Volume 8, No. 1-26 (January 2, 1961 to June 26, 1961)

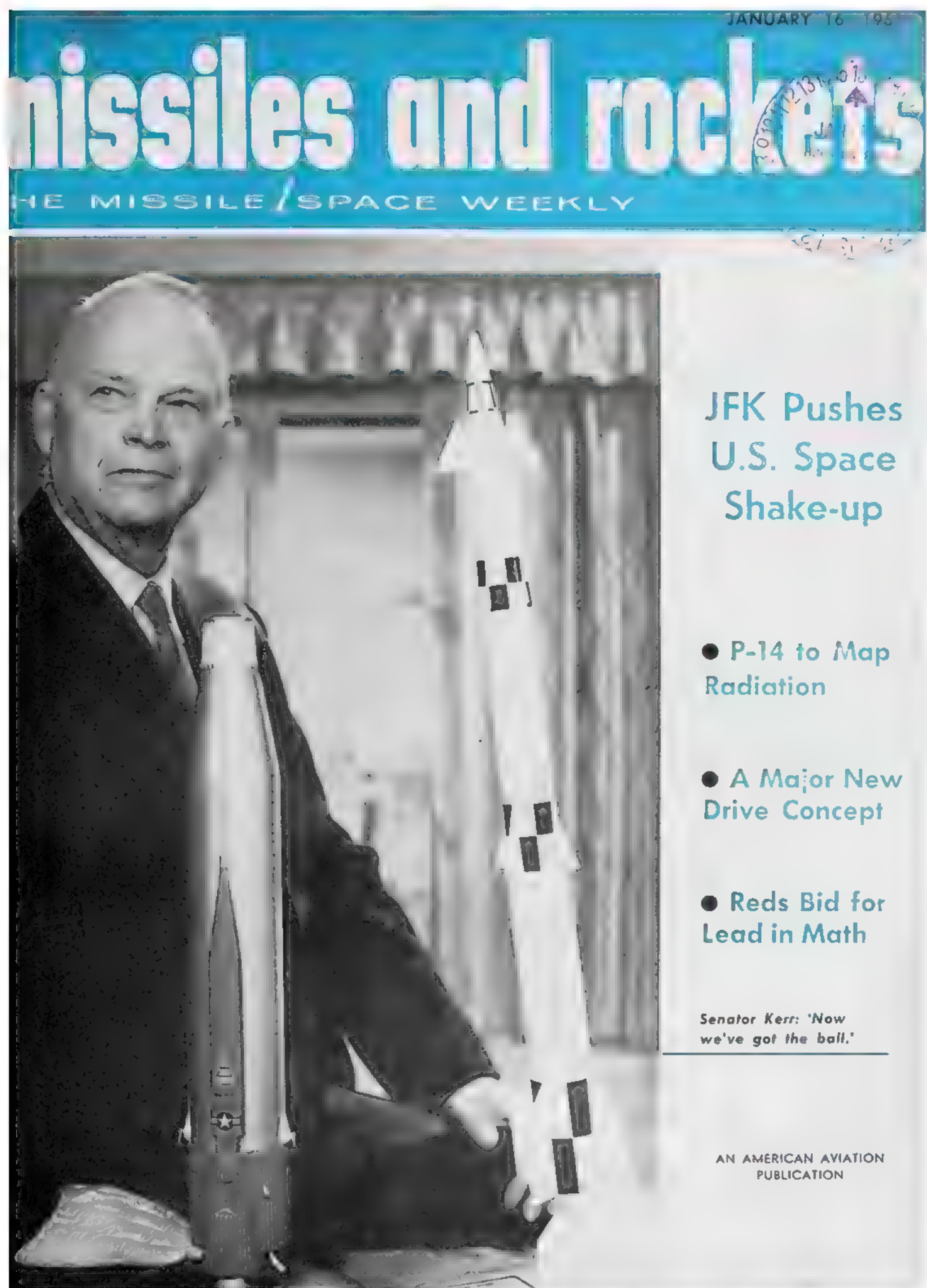
Volume 9, No. 1-25 (July 3, 1961 to December 18, 1961)
(*Dec. 25, 1961 was not issued)



1961_01_02_Missiles_Rockets.jpg



1961_01_09_Missiles_Rockets.jpg



1961_01_16_Missiles_Rockets.jpg



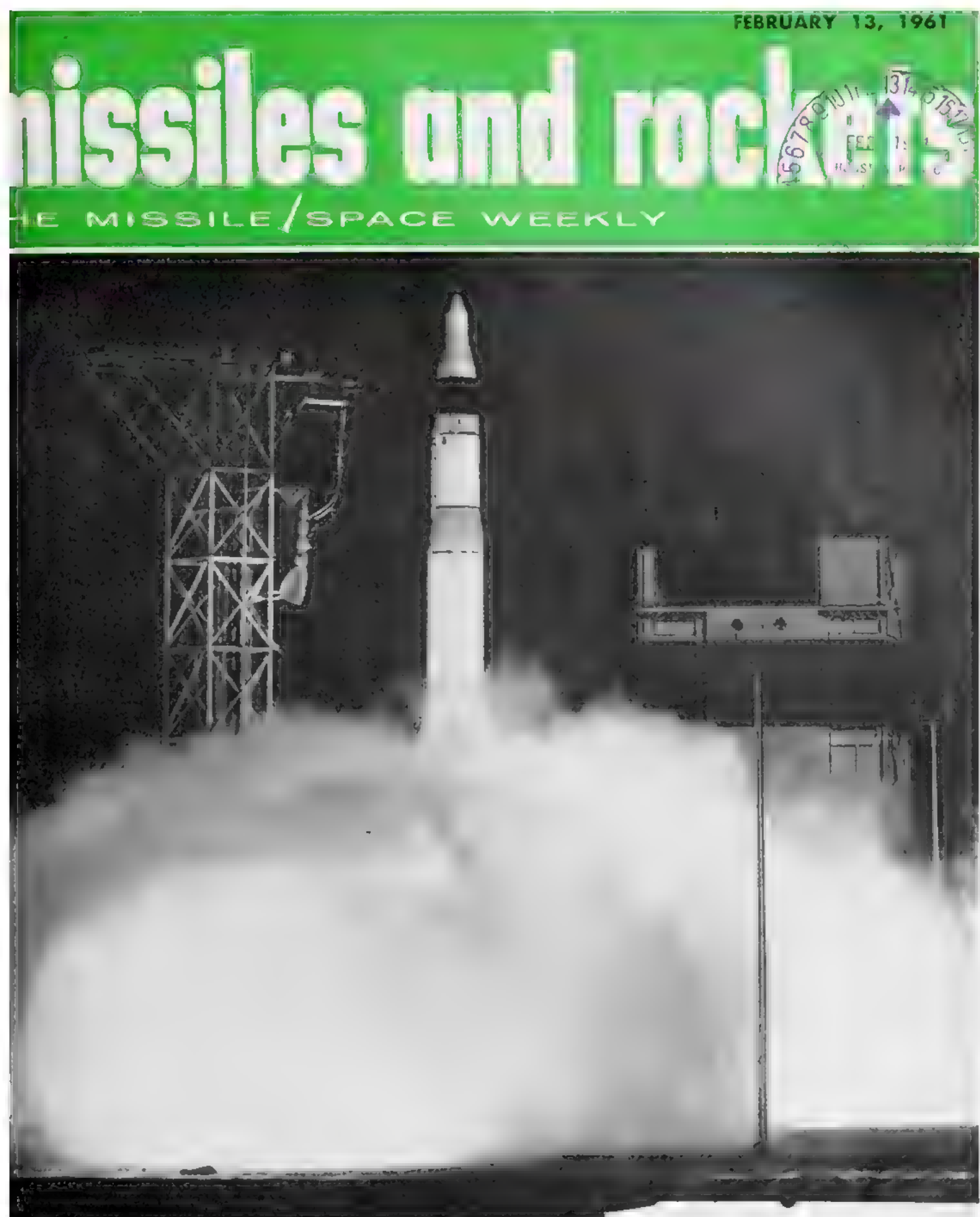
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1961_02_06_Missiles_Rockets.jpg

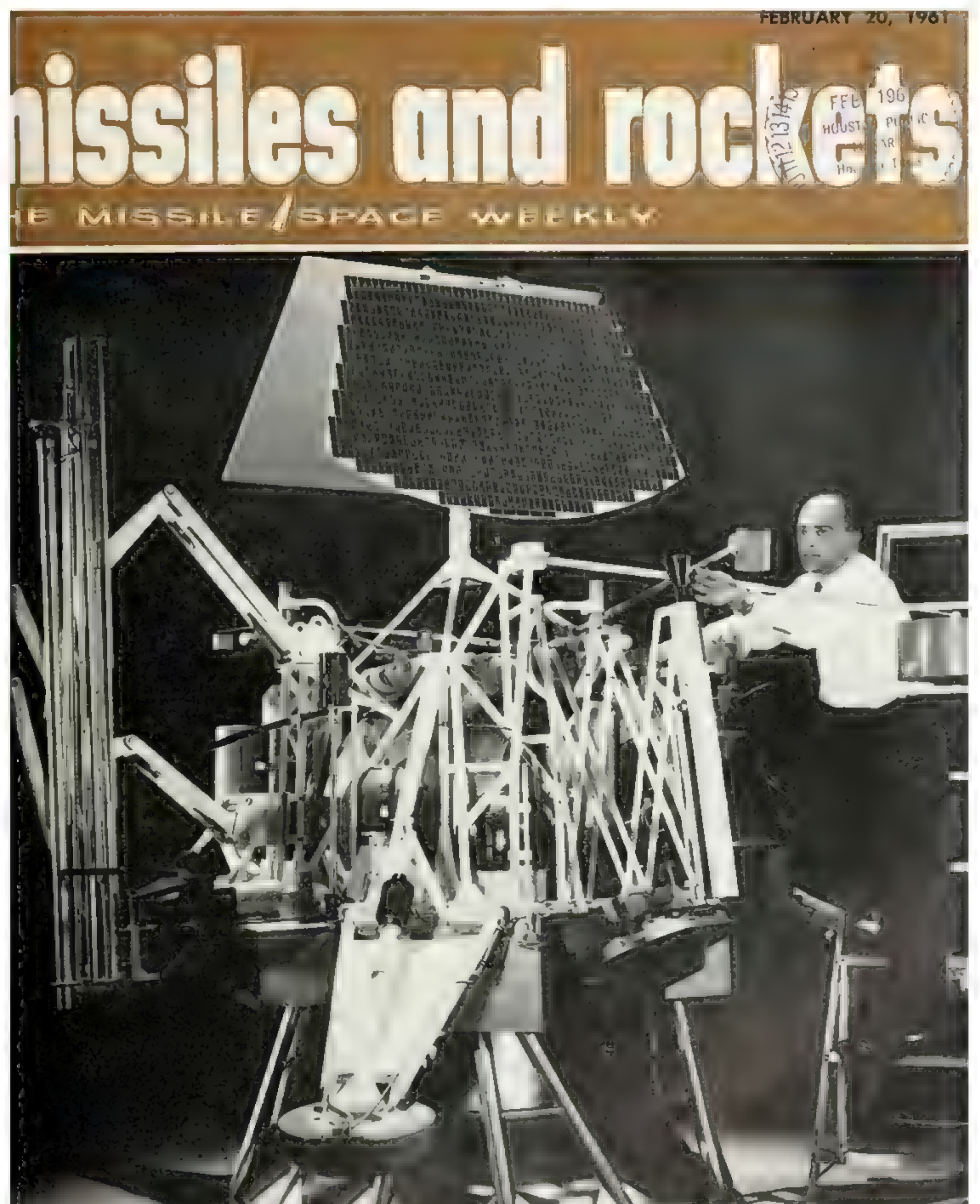


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AN AMERICAN AVIATION PUBLICATION

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4th Annual Electronics Issue

Why the \$1 Billion Guidance and Control Market Will Grow Bigger

First G&C Details:

- Minuteman
- Titan II
- Dyna-Soar
- Saturn

Antenna Guides Titan Shot

This issue: \$1.00

An American Aviation

1961_02_27_Missiles_Rockets.jpg



Dyna-Soar Will Get Solid-fuel 3rd Stage

● JFK Weighs 'Shift' in Arms

● Cleaners Bare Missile Flaws

● New Edition—M/R Astrolog

Convair's Three-Man Space Station Model

AN AMERICAN AVIATION PUBLICATION

1961_03_06_Missiles_Rockets.jpg



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Cost Bind Hurts Plan To Bolster Small War Forces

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● How U.S. Aids Overseas Sales

Little Joe Ready to Go

AN AMERICAN AVIATION PUBLICATION

1961_03_20_Missiles_Rockets.jpg



1961_03_27_Missiles_Rockets.jpg



1961_04_03_Missiles_Rockets.jpg



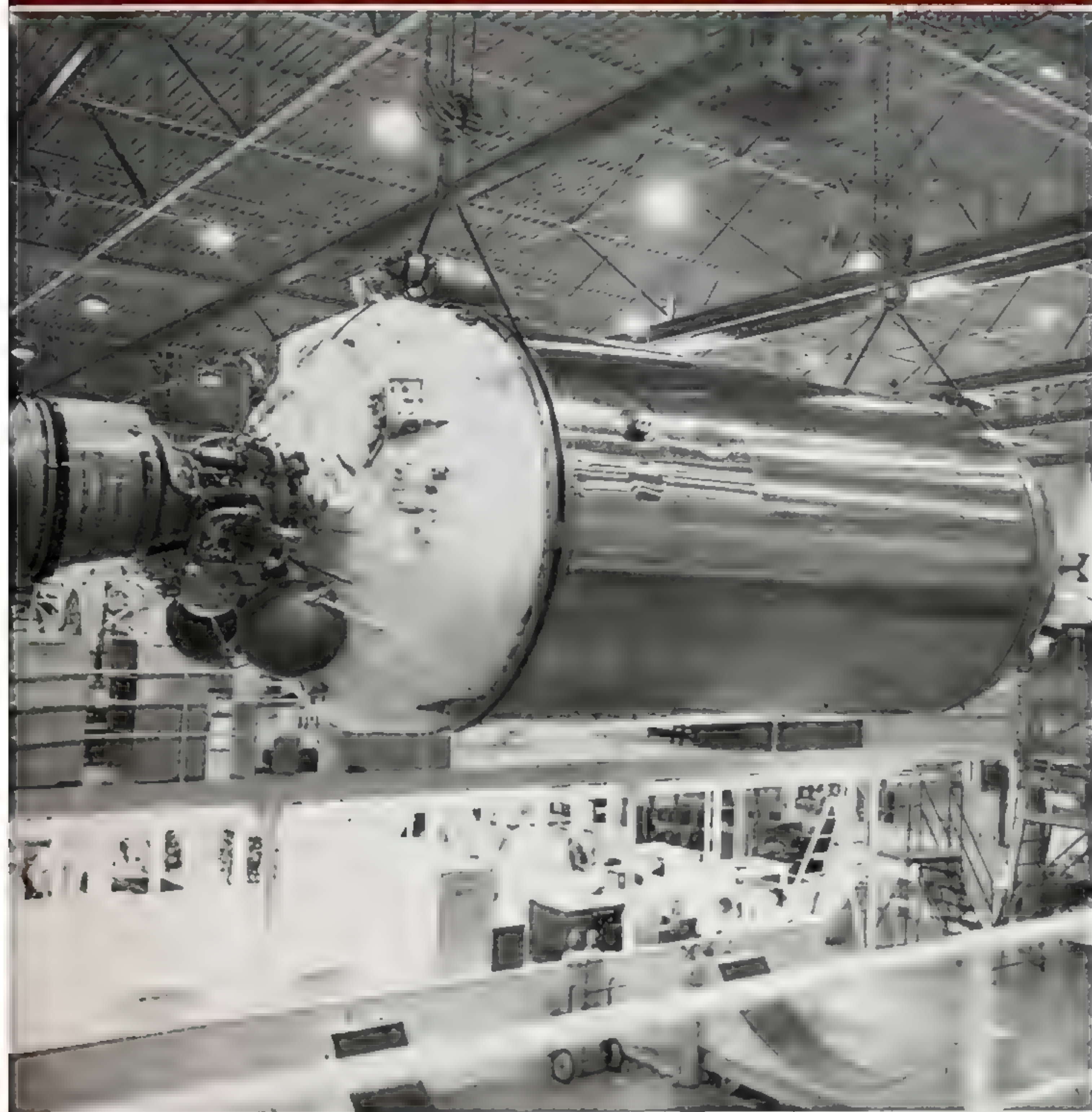
1961_04_10_Missiles_Rockets.jpg



1961_04_17_Missiles_Rockets.jpg

missiles and rockets

THE MISSILE / SPACE WEEKLY



Centaur Heads for Static Testing

CAMAL Knocked from AF's Arsenal . .
Drydocks Proposed as Launch Platform
Direct Winding May Cut Cost of Cases

1961_04_24_Missiles_Rockets.jpg

missiles and rockets

THE MISSILE / SPACE WEEKLY



**Will U.S.
 Compete
 With Russia
 In Race
 For Moon?**

● **No Easy Cure
 For Booster Gap**

● **AF to Orbit
 Apes for Weeks**

● **'Space Drive'
 System Debated**

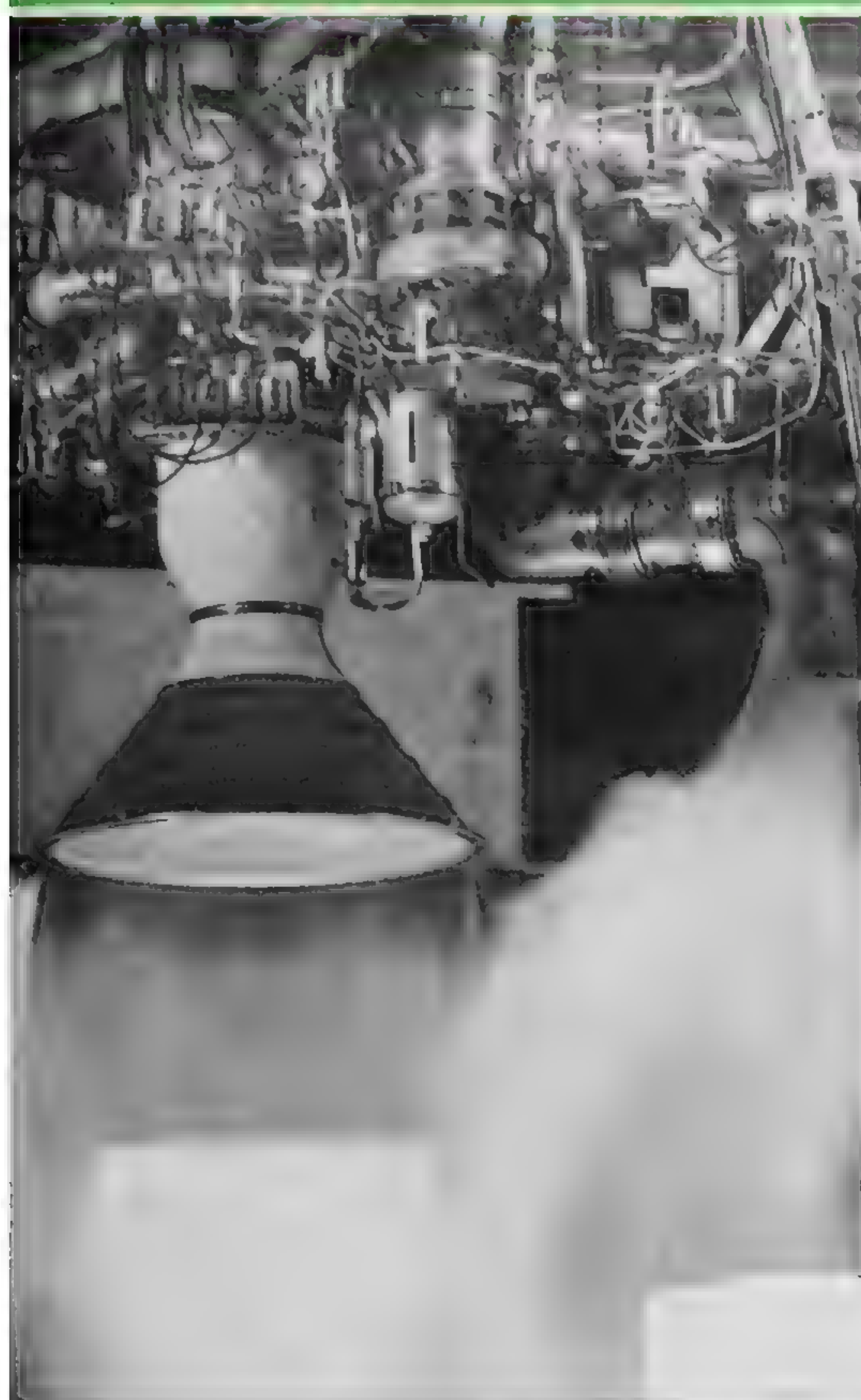
Sperry's Tube Test Plant

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1961_05_01_Missiles_Rockets.jpg

missiles and rockets

THE MISSILE / SPACE WEEKLY



**U.S.-British
 Row Could
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● **MR-3 Launch
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● **Titan to Get
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● **New Edition—
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Firing Titan II 2nd Stage

AN AMERICAN AVIATION
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1961_05_08_Missiles_Rockets.jpg

missiles and rockets

THE MISSILE / SPACE WEEKLY



Alan Shepard—Free World's First Man in Space

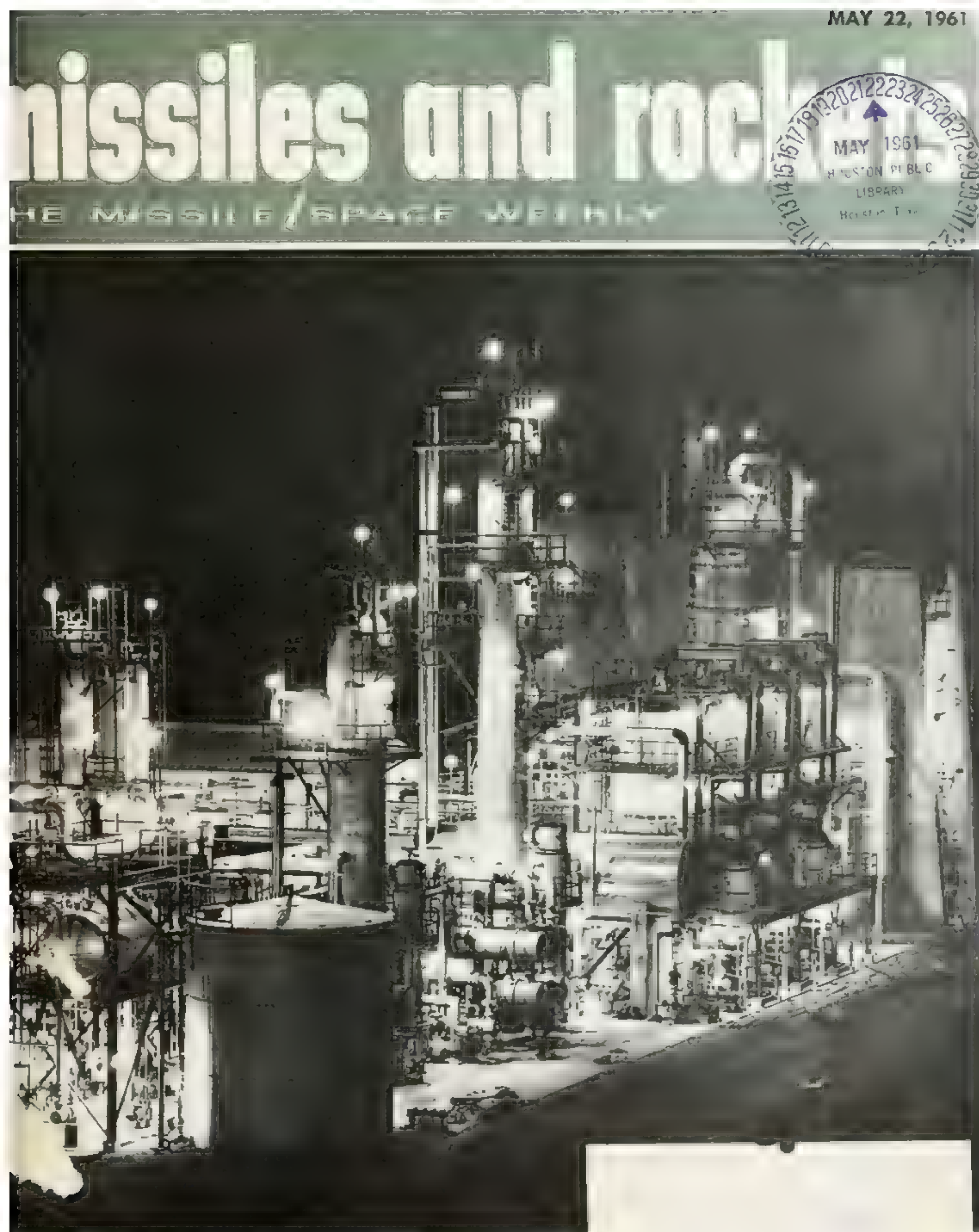
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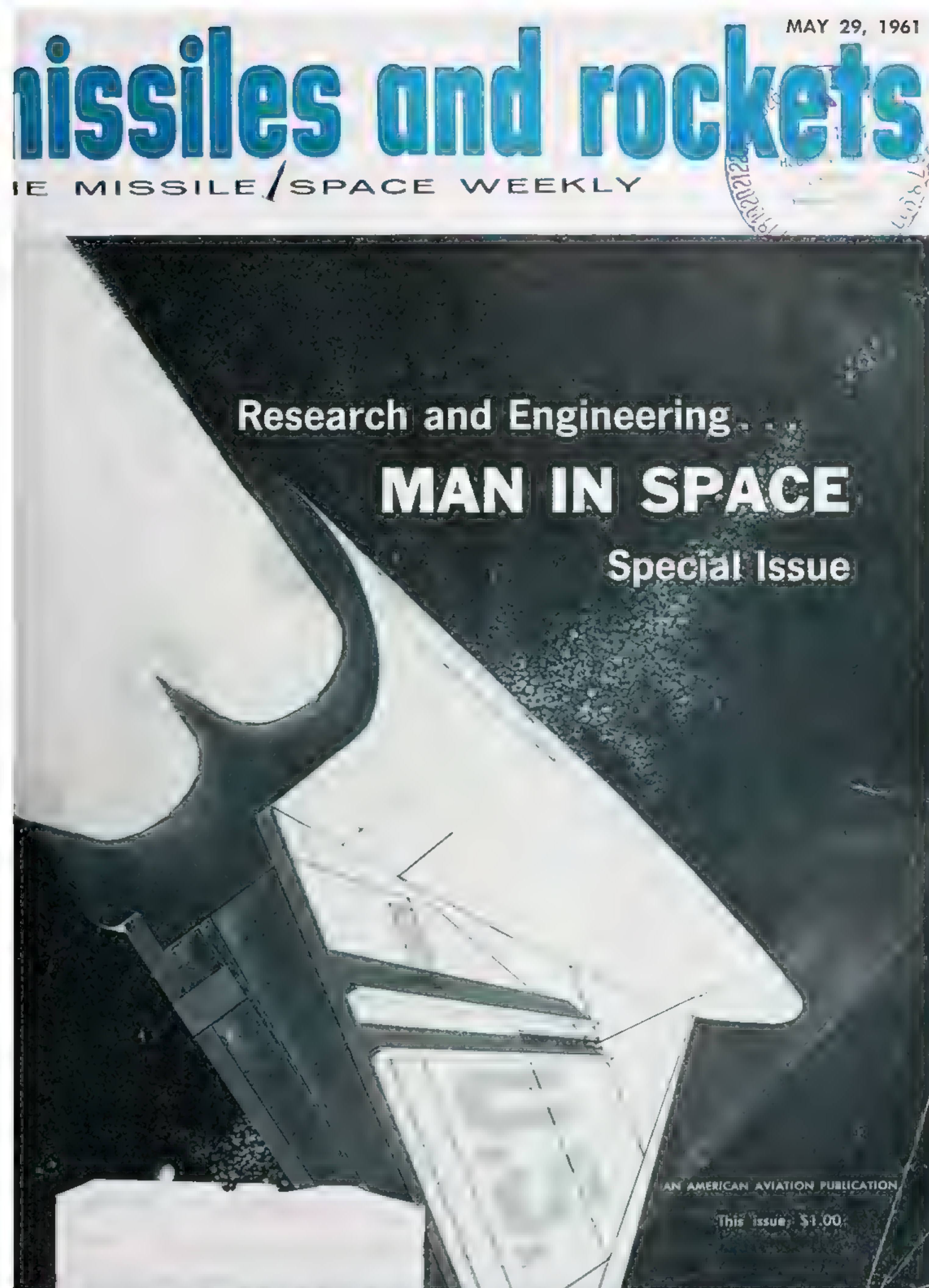
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Research and Engineering

MAN IN SPACE

Special Issue

AN AMERICAN AVIATION PUBLICATION

This Issue: \$1.00

1961_05_29_Missiles_Rockets.jpg



**JFK Switch
Leaves Door
Open for
Military
M-I-S**

● Report from
Paris Air Show

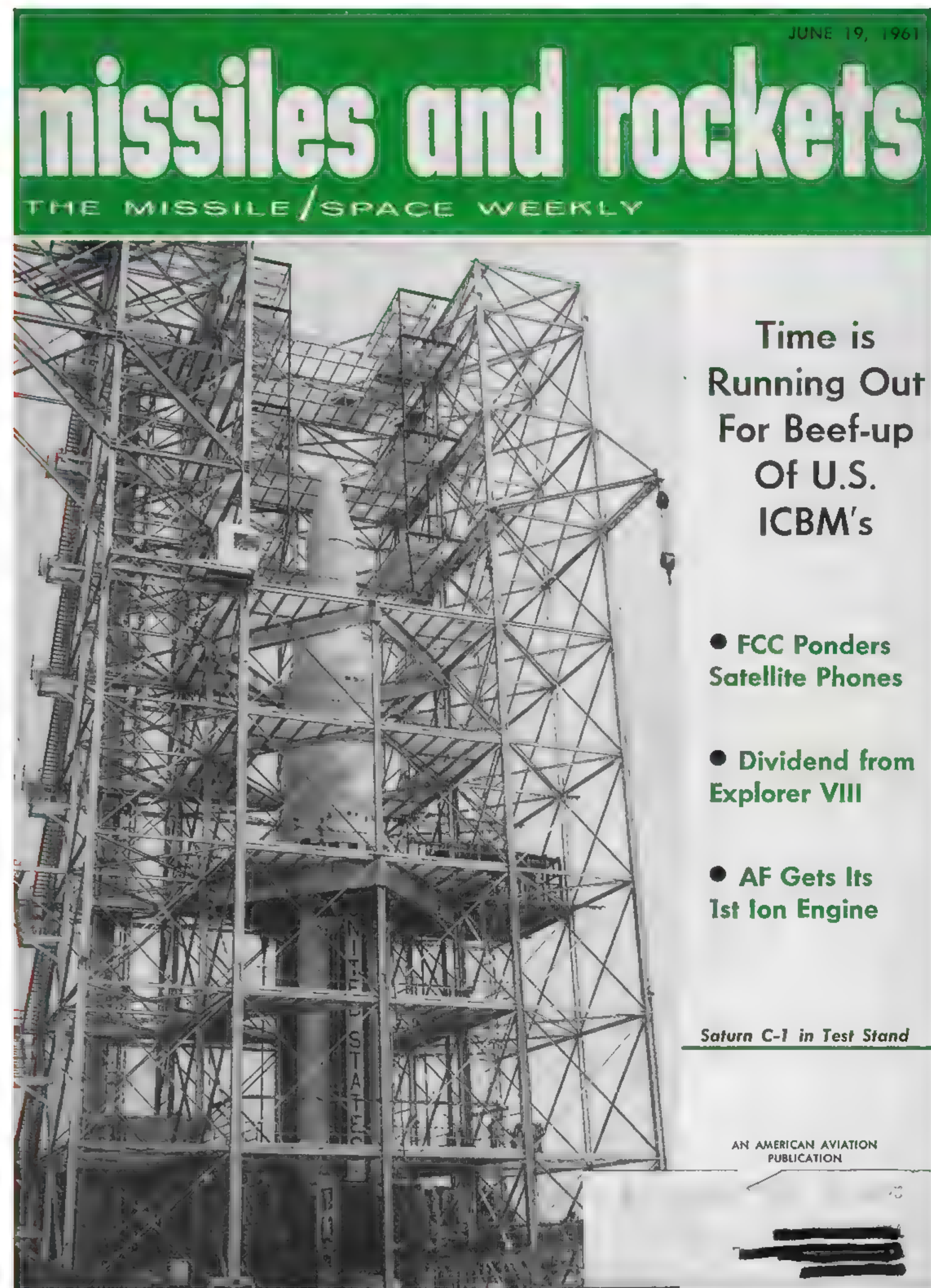
● Nord's AS-30
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● ASW Research
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Coffin-launched Atlas ICBM

AN AMERICAN AVIATION
PUBLICATION

1961_06_05_Missiles_Rockets.jpg



**Time is
Running Out
For Beef-up
Of U.S.
ICBM's**

● FCC Ponders
Satellite Phones

● Dividend from
Explorer VIII

● AF Gets Its
1st Ion Engine

Saturn C-1 in Test Stand

AN AMERICAN AVIATION
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missiles and rockets

THE MISSILE/SPACE WEEKLY

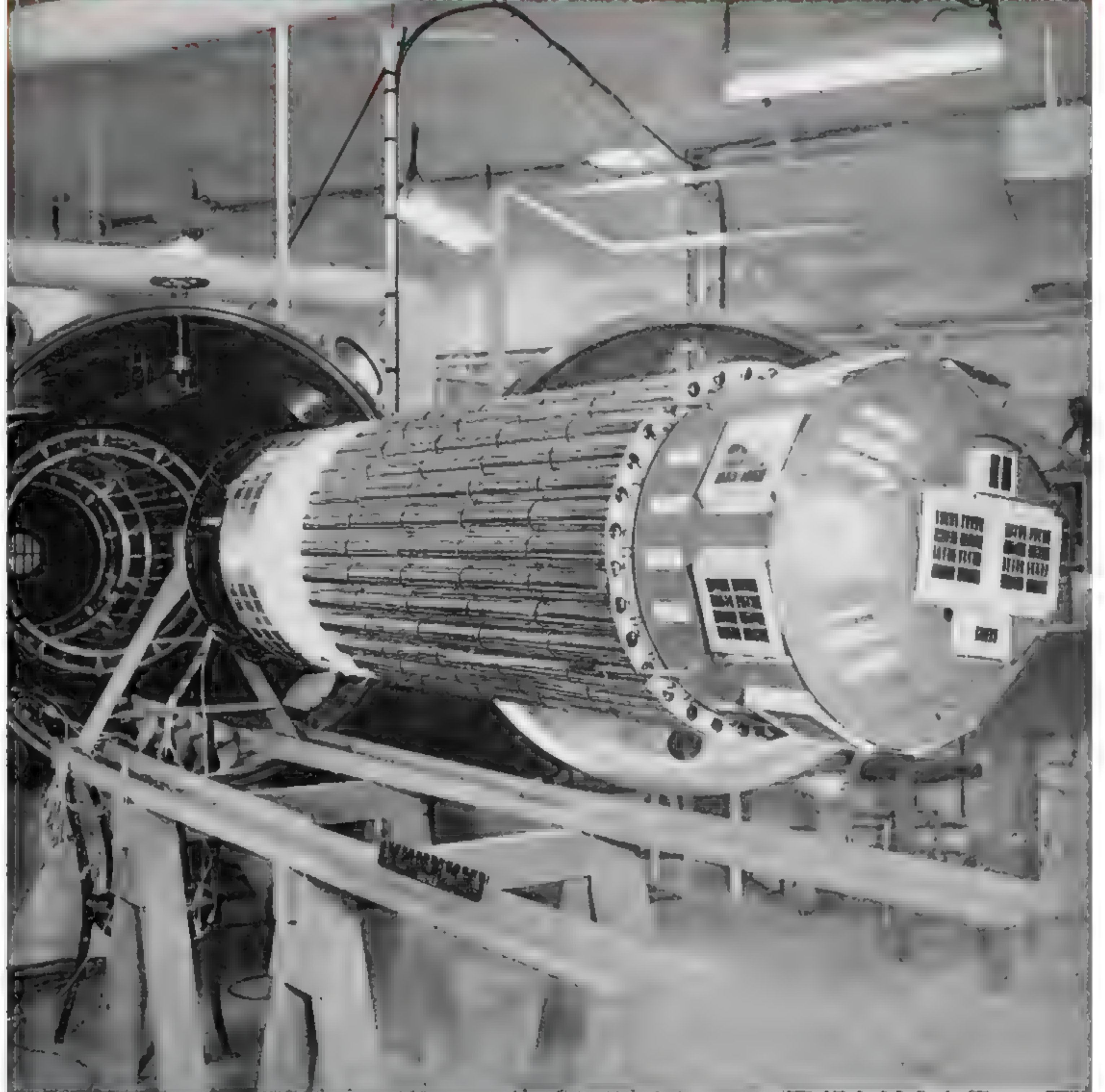


Churchill's SD-5—Springboard to Big R&D
First Details of S-48 'Topside Sounder' . . .
MOD Plans Major Changes in Contracting
Murtiss-Wright's Motor Case Know-how . .

1961_06_26_Missiles_Rockets.jpg

missiles and rockets

THE MISSILE/SPACE WEEKLY



5 Micrometeoroid Satellite Gets Vacuum Test
Congress Pushes Dyna-Soar Acceleration .
Douglas Proposes Beefing Up of Thors . . .
Test Edition of M/R's Astroloa

1961_07_03_Missiles_Rockets.jpg

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missiles and rockets

THE MISSILE/SPACE WEEKLY



Successful First Launch of Minuteman
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missiles and rockets

THE MISSILE/SPACE WEEKLY



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First Photo of Ranger Lunar Spacecraft

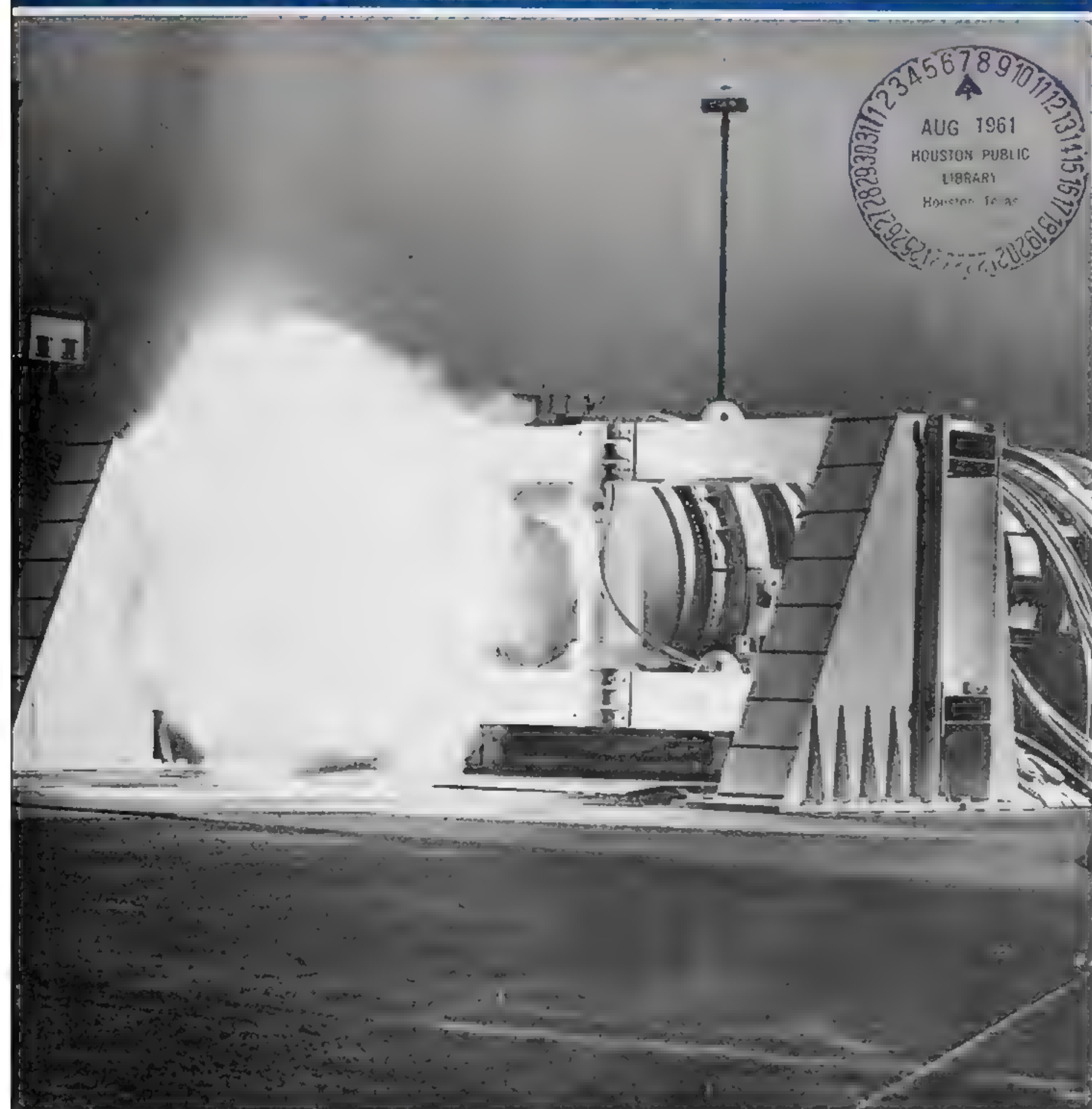
Kennedy Ups the Tactical Missile Ante . .
Ranger to Advance U.S. Space Frontiers .
Door Opens to 'Low Temp' Thermionics . .

AN AMERICAN AVIATION PUBLICATION

1961_07_31_Missiles_Rockets.jpg

missiles and rockets

THE MISSILE/SPACE WEEKLY



Moment of ignition—Aerojet's big solid motor

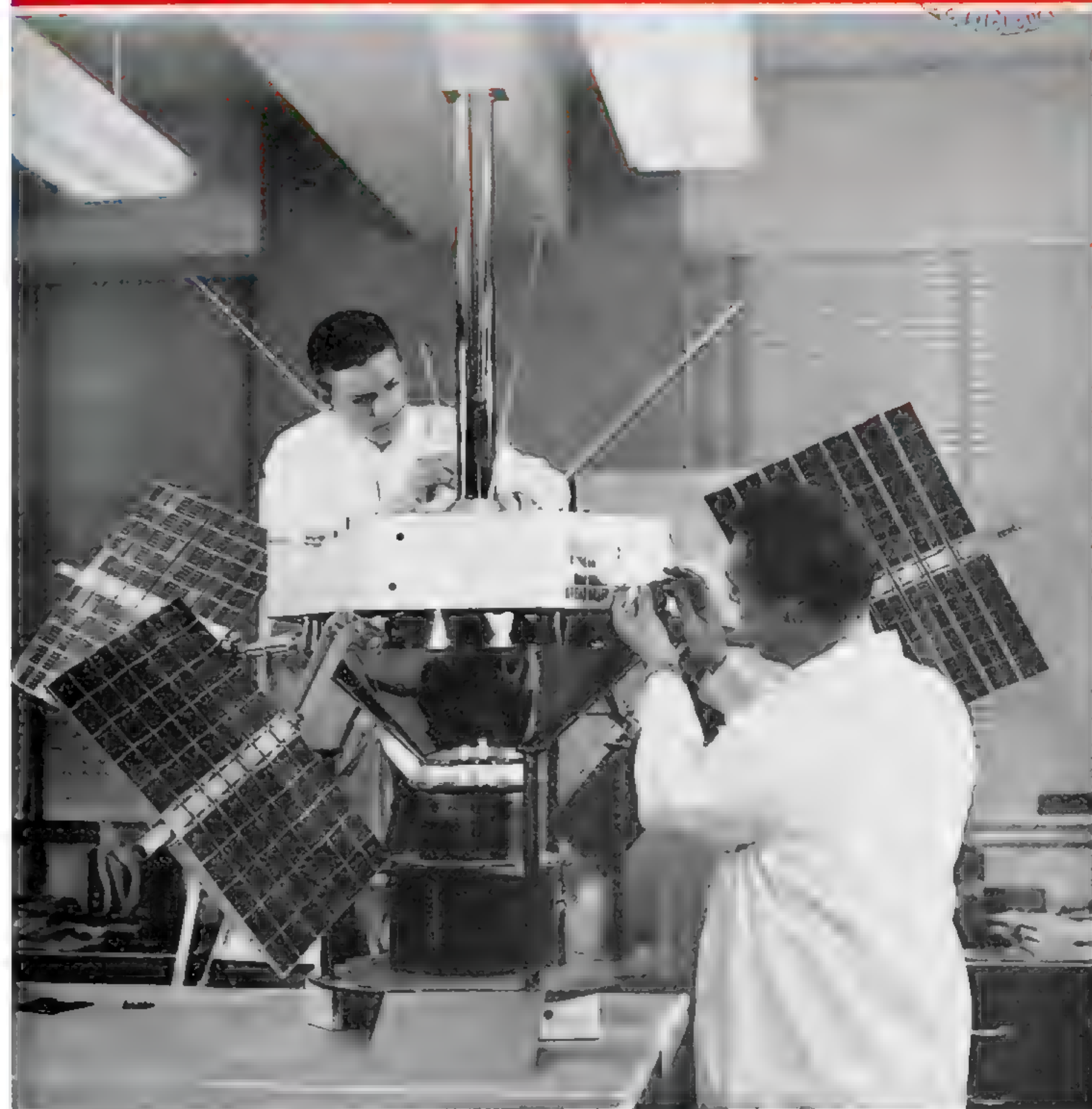
Permanent \$47 Billion DOD Budget H
Major Saturn Program Changes on W
Glimps for Mercury Ocean Recovery? .

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missiles and rockets

THE MISSILE/SPACE WEEKLY



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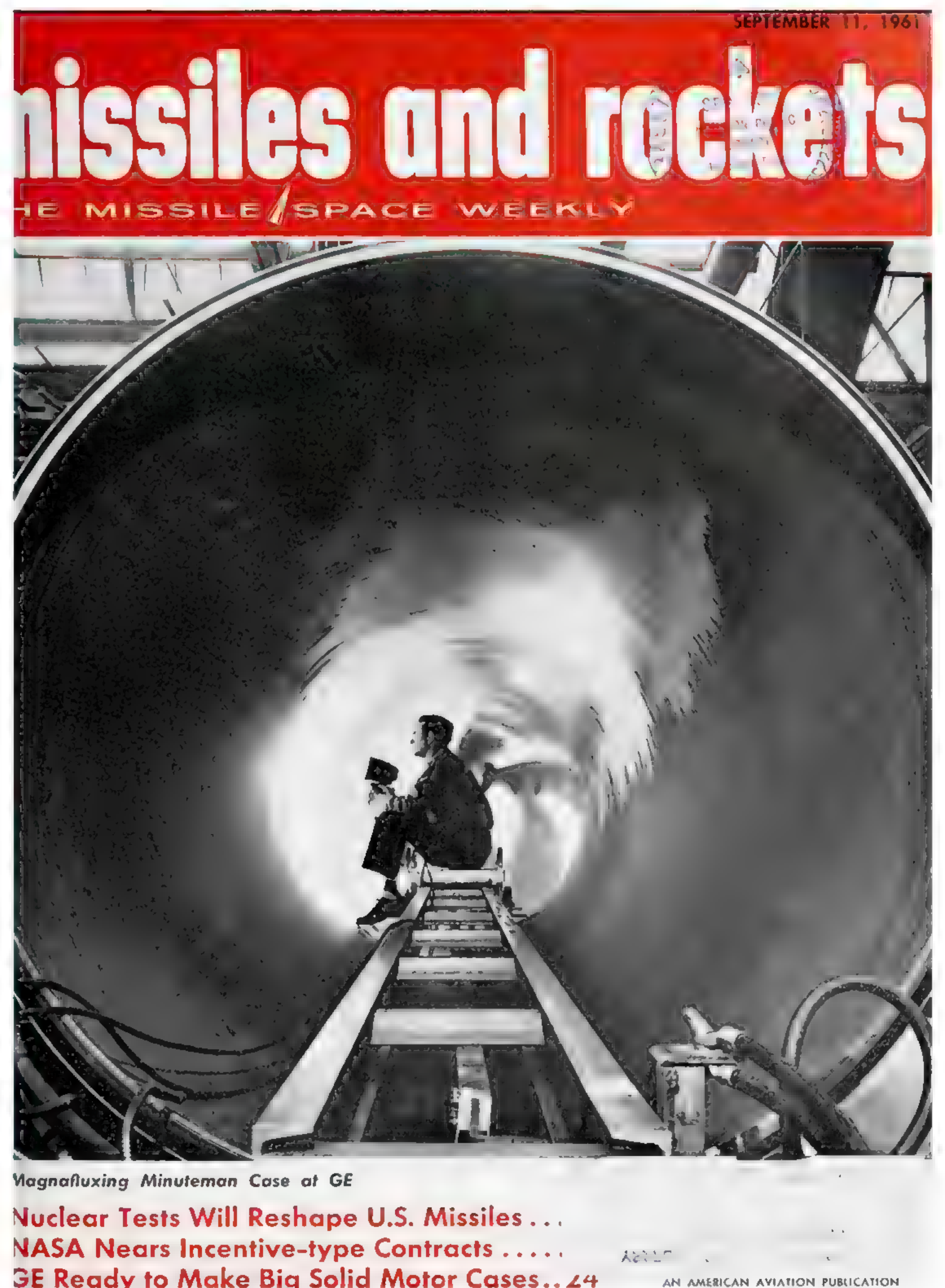
1961_08_21_Missiles_Rockets.jpg



1961_08_28_Missiles_Rockets.jpg



1961_09_04_Missiles_Rockets.jpg



1961_09_11_Missiles_Rockets.jpg

SEPTEMBER 18, 1961

missiles and rockets

THE MISSILE/SPACE WEEKLY



1961_09_18_Missiles_Rockets.jpg

SEPTEMBER 25, 1961

missiles and rockets

THE MISSILE/SPACE WEEKLY



Special
M/R Report
On Scope of
Electronic
Warfare

- Delays Snarl Nuclear Program
- AF Overhauls Its Code Names
- NASA Ponders Saturn Speed-up

Gantryless Saturn at Cape

AN AMERICAN AVIATION PUBLICATION

1961_09_25_Missiles_Rockets.jpg

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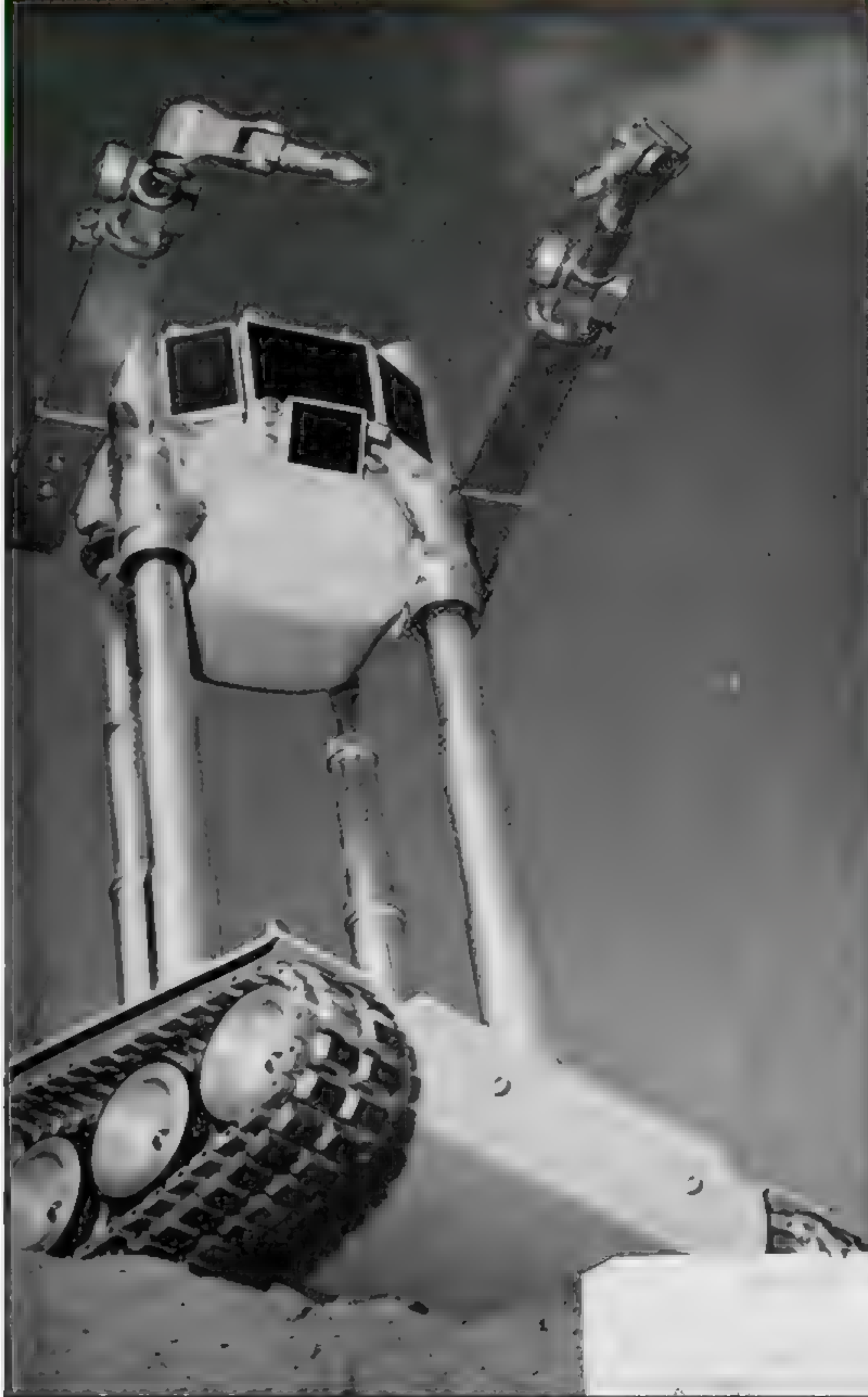
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OCTOBER 9, 1961

missiles and rockets

THE MISSILE/SPACE WEEKLY



R&D for
Arms Control
Will Cost
Millions of
Dollars

- U.S. to Push Rendezvous Plan
- NASA Revises Patent Proposals
- Mercury's 'Pilot' Controls

GE's 'Beetle'

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missiles and rockets

OCTOBER 16, 1961
THE MISSILE/SPACE WEEKLY



Communications Satellite

Report from Biggest ARS Meeting . . .

SAC Considers Interim M-I-S Program

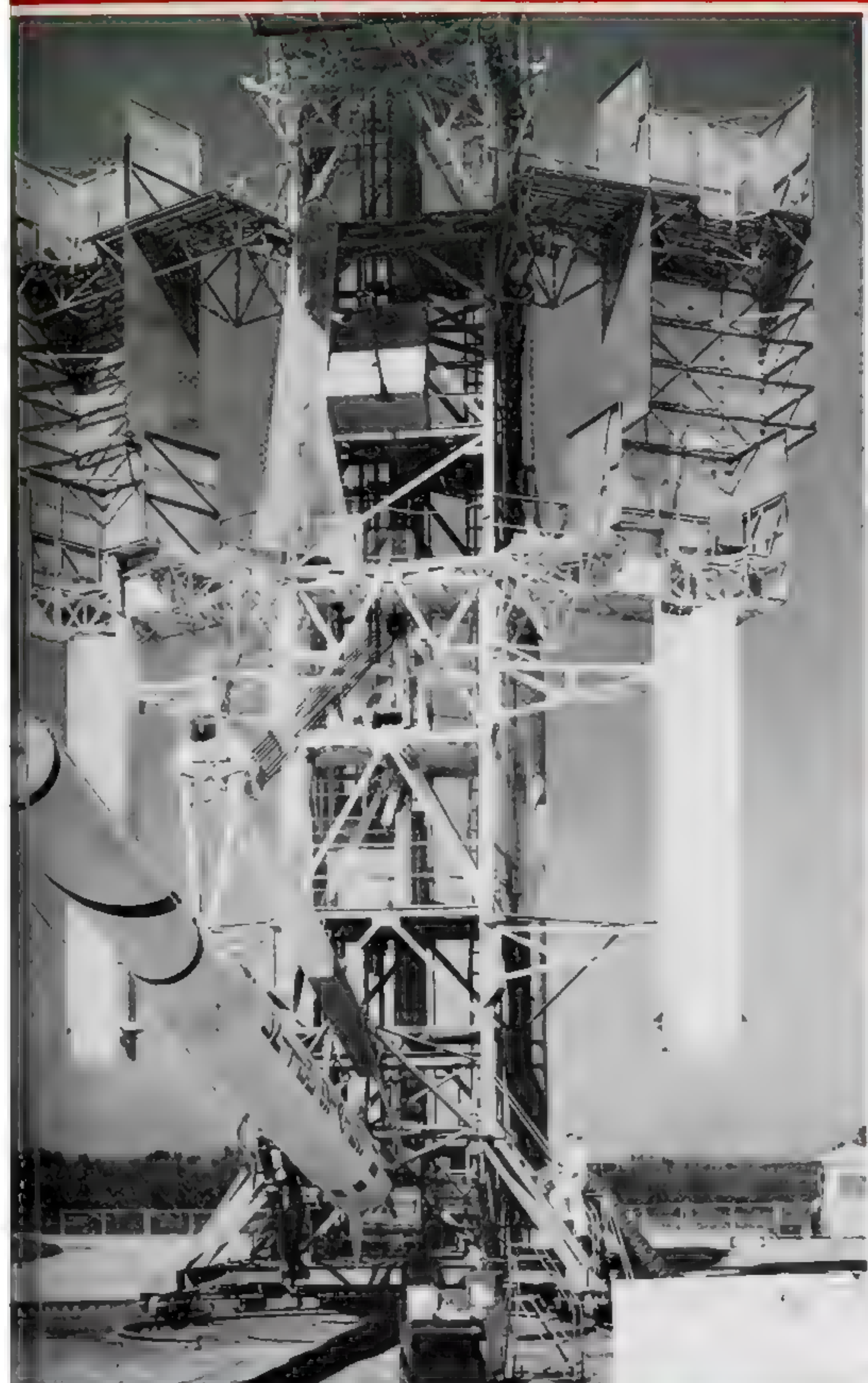
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● **Major Shift
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● **Army's Highly
Mobile Mauler**

● **Boeing's New
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*Scout 7 Readied
for Launch*

AN AMERICAN AVIATION
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missiles and rockets

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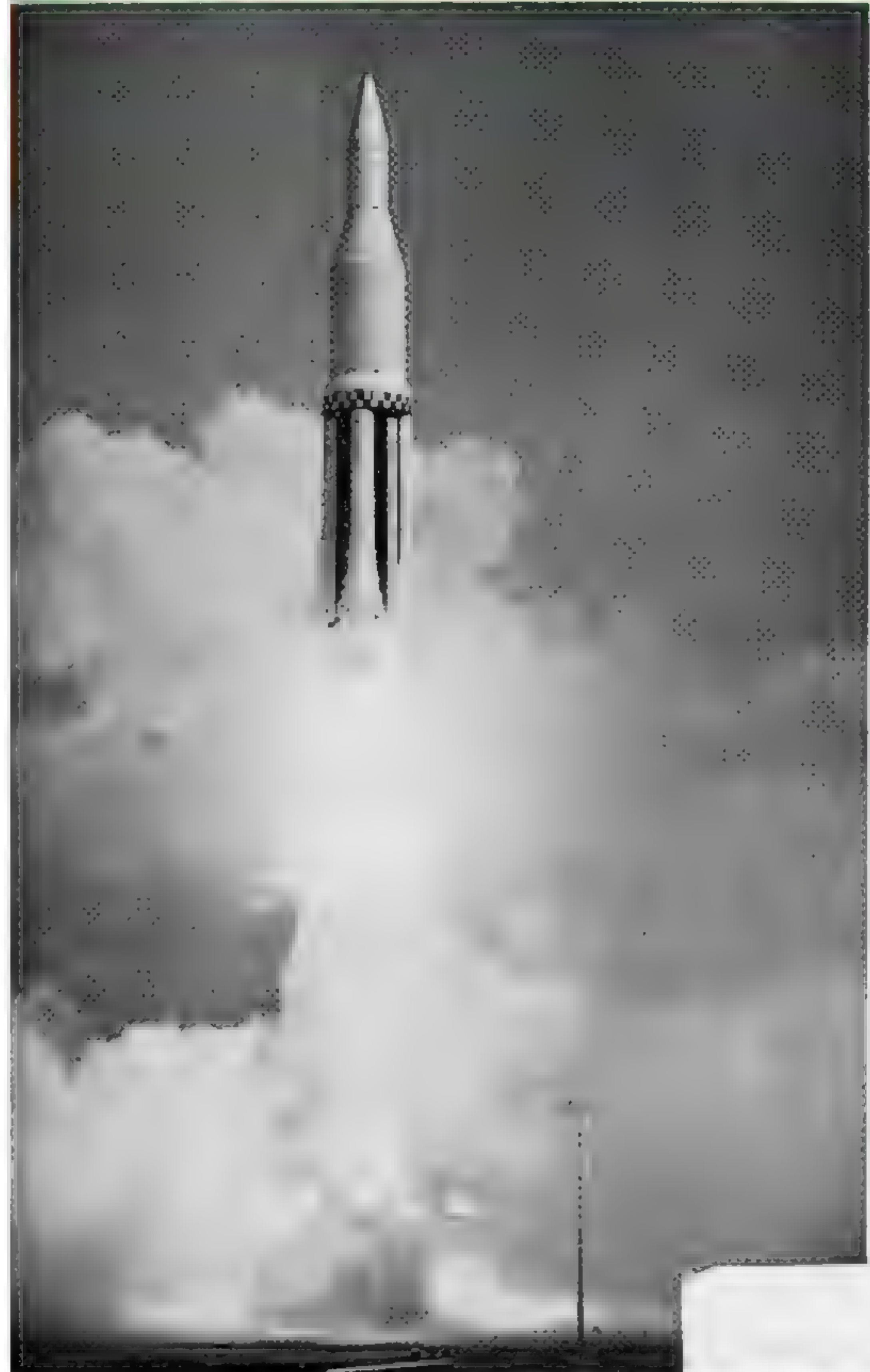
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**NATO Arms
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\$1 Billion
Being Spent
In U.S.**

● **How Red Tests
Affect Strategy**

● **Special Report:
Saturn's Future**

● **Latest Edition
Of M/R Astrolog**

Saturn's First Liftoff

AN AMERICAN AVIATION
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1961_11_06_Missiles_Rockets.jpg

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 t Least 10 Aneloes Will Be Built
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missiles and rockets

THE MISSILE/SPACE WEEKLY



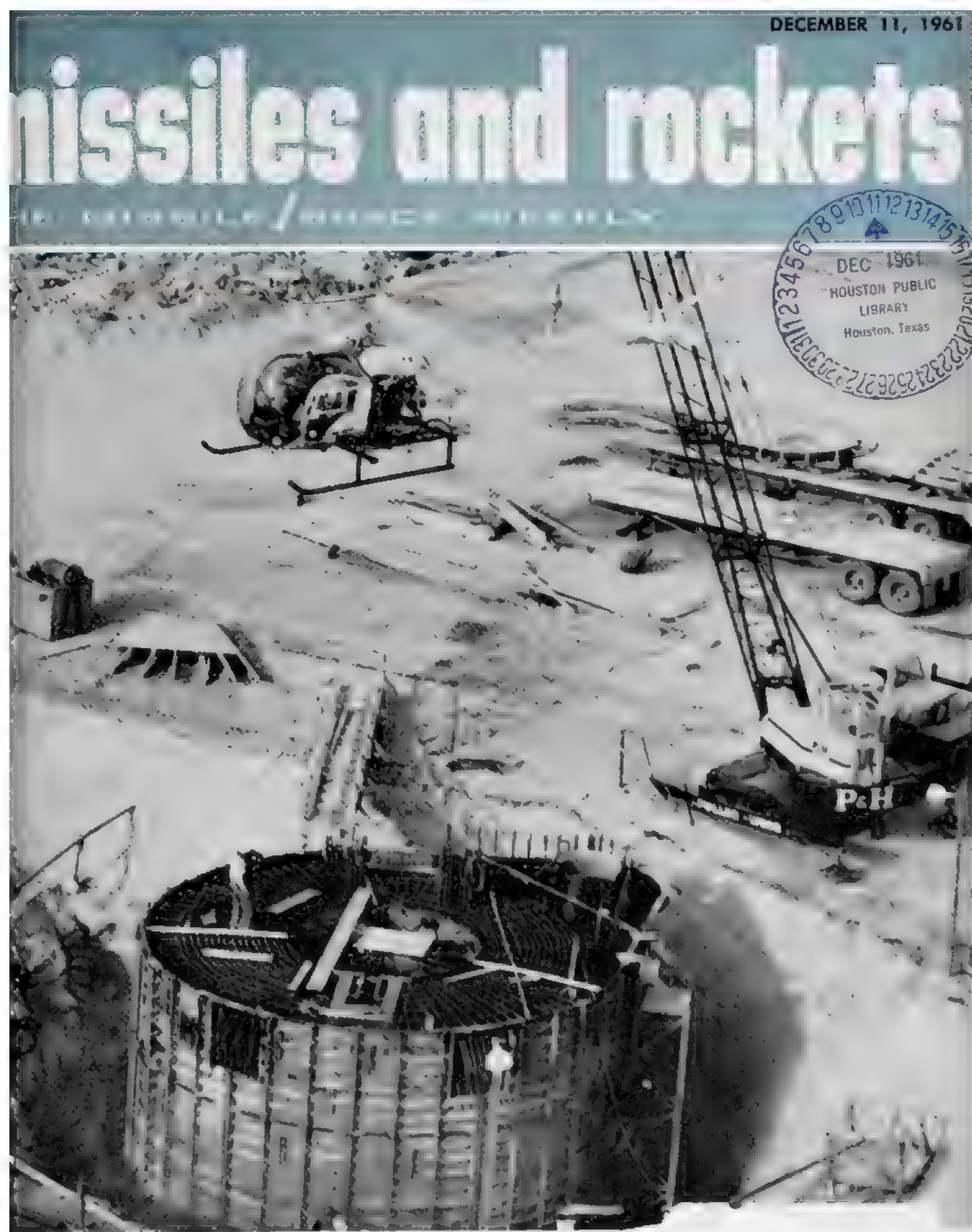
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missiles and rockets

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**Boeing
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● **NASA Buying
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● **Minuteman
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● **Details of
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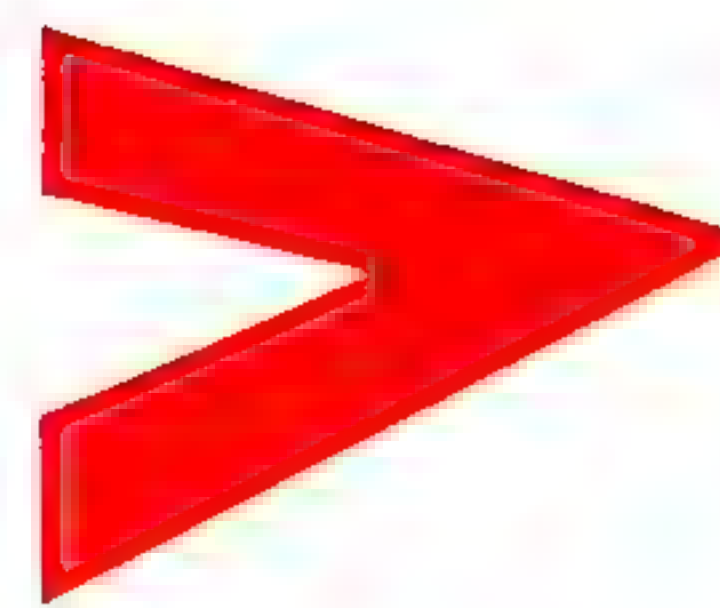
**UTC Fires 100-in.
 Segmented Solid**

AN AMERICAN AVIATION
 PUBLICATION

1961_12_18_Missiles_Rockets.jpg

***Note: Missiles and Rockets
 did not publish a magazine
 for the week of 12-25-1961.**

missiles and rockets



MAGAZINE OF WORLD ASTRONAUTICS



Missiles and Rockets - Magazine of World Astronautics
Published by American Publications, Inc.
Washington D.C.

1962

Volume 10, No. 1-26 (January 1, 1962 to June 25, 1962)

Volume 11, No. 1-26 (July 2, 1962 to December 24, 1962)
(*Dec. 31, 1962 was not issued)

missiles and rockets

THE MISSILE / SPACE WEEKLY



The Navy's Wakelin—New Directions in R&D
 New Million-lb.-thrust Engine Planned . .
 Special Report: Inside Navy Research . . .
 Latest Edition of M/R's Astrolog

1962_01_01_Missiles_Rockets.jpg

missiles and rockets

THE MISSILE / SPACE WEEKLY



Space
 Council
 Unifying
 U.S. Program
 Objectives

- Nova Awards Due By Mid-Year
- New Apollo, Gemini Designs
- Beryllium Breakthrough

New Army Space Tracker

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THE MISSILE / SPACE WEEKLY



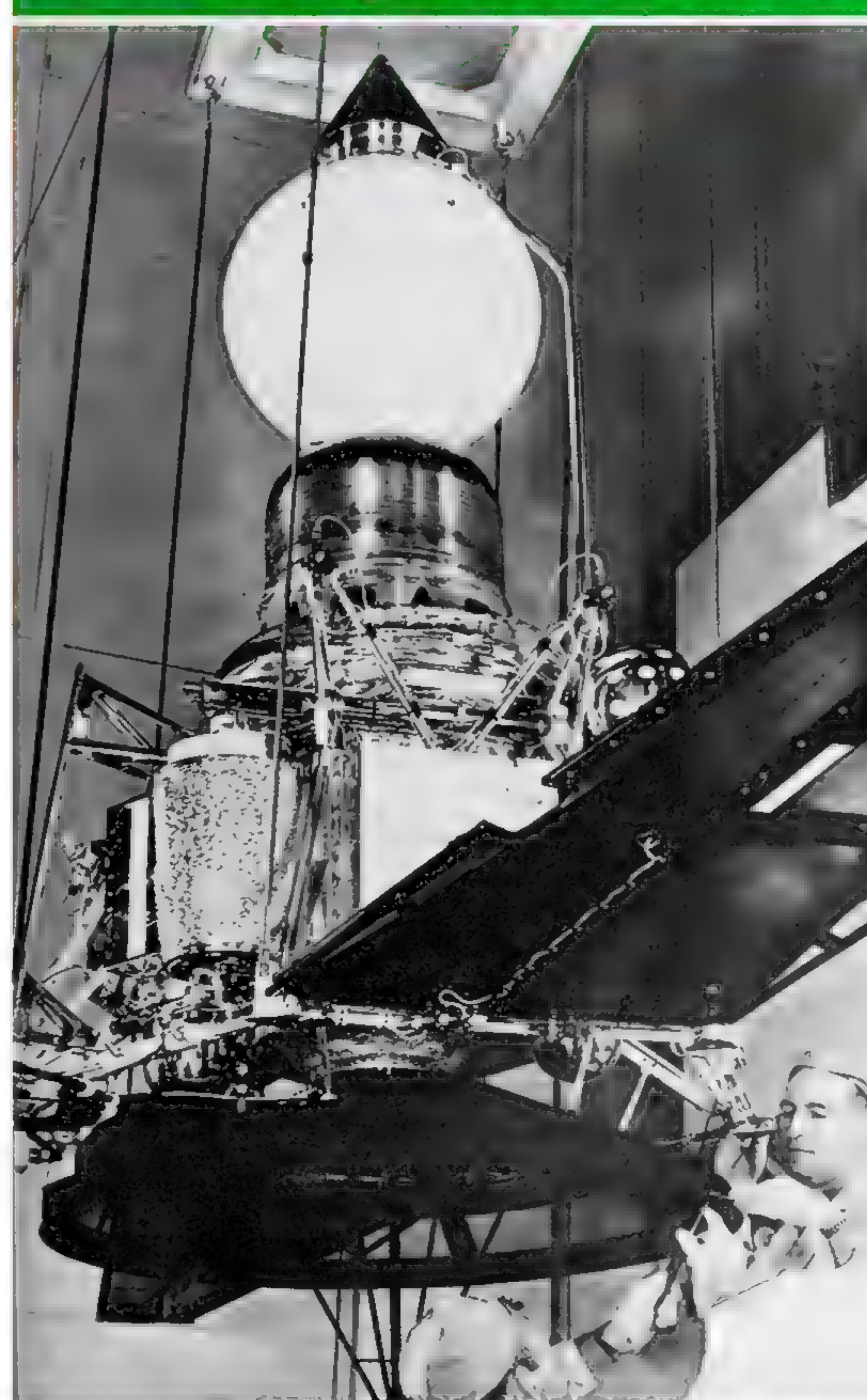
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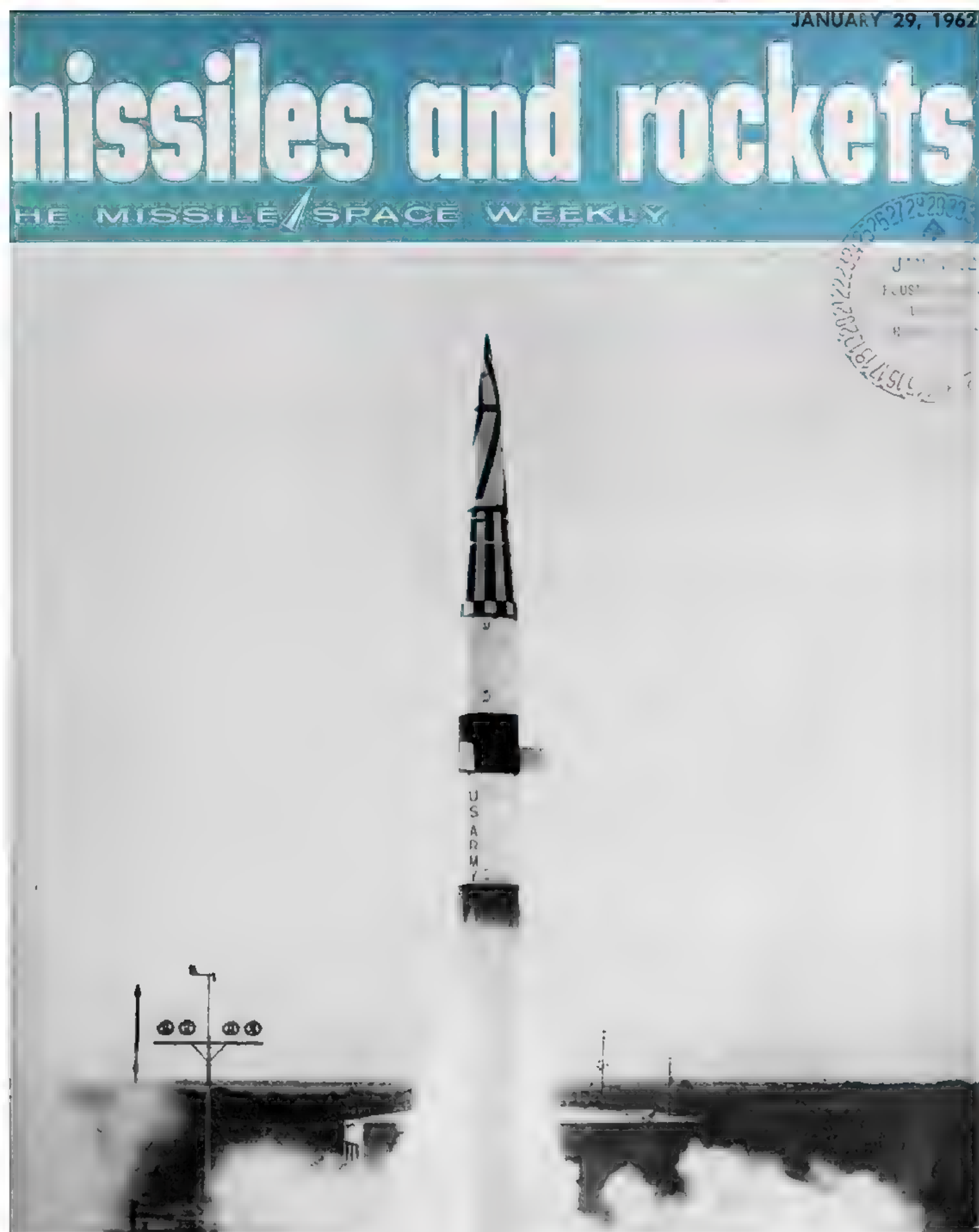
Fiscal '63
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 Missiles and
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- Lunar Funding Gains Momentum
- Minuteman, Polaris Build-up
- Money for Mobile MRBM

Ranger III With
 Lunar Impact Capsule

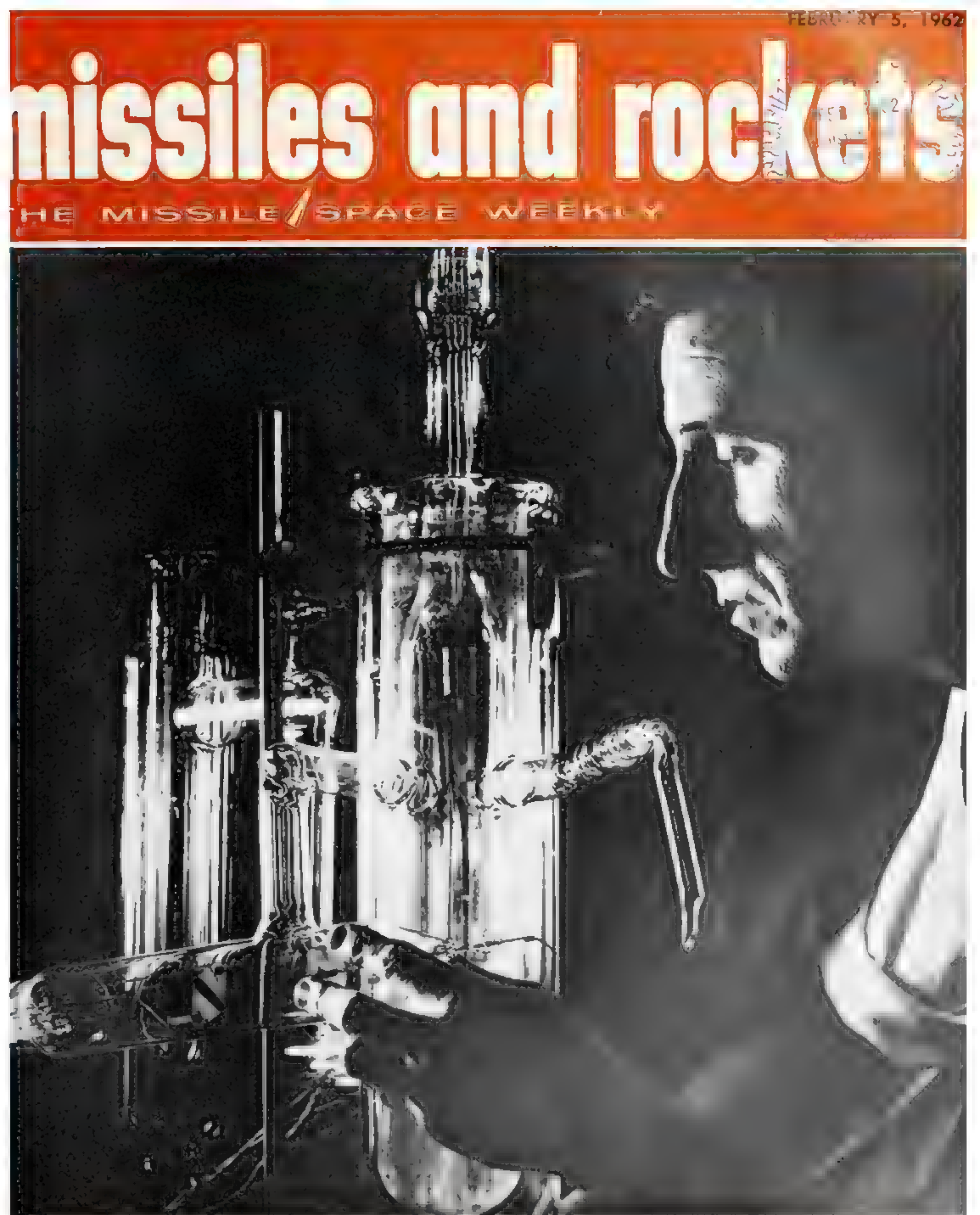
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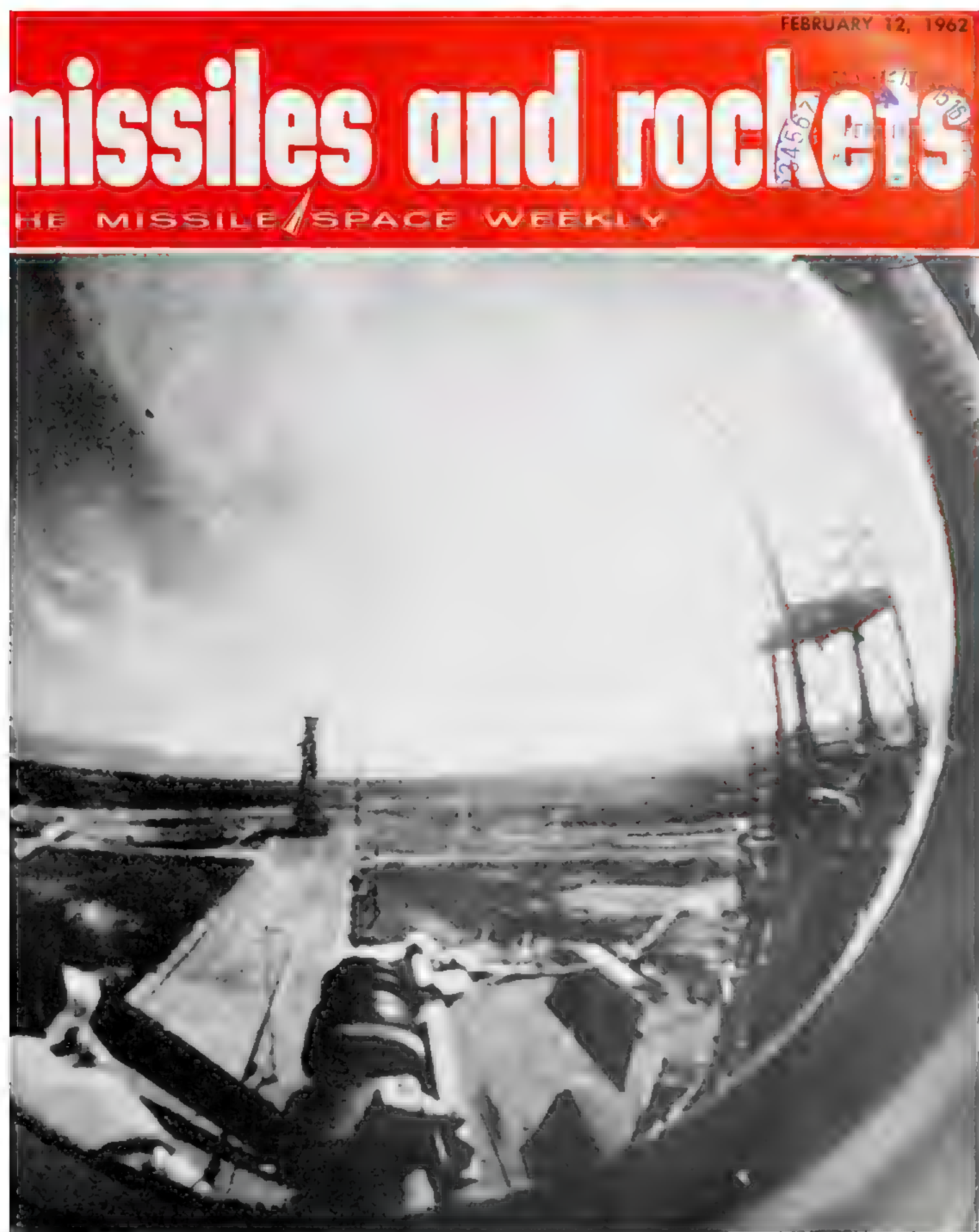
Operational-type Pershing Passes Flight Test
 Pershing To Enter Production Soon
 18-Orbit Mercury Launch Slips to '63 . . .
 Ultrasonics Conquering Refractories

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Studying Solid Formation Under Space Conditions
 Could J'burg Control Have Landed Ranger?
 Star Gazer May Revolutionize Astronomy
 SPECIAL REPORT: Electrical Propulsion . . .

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View of Cape Canaveral Through MA-6 Periscope
 Centaur Delays Crimp Apollo Planning . .
 Pogo-Hi Bolsters Case for Sea-Launch . . .
 Polaris Launcher Production Speeded . . .

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Successful Landing of Army's SD-5 Drone
 Nuclear Spacepower: 3-Way Tug-of-War
 Apollo Lunar-landing Module Award Near
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missiles and rockets
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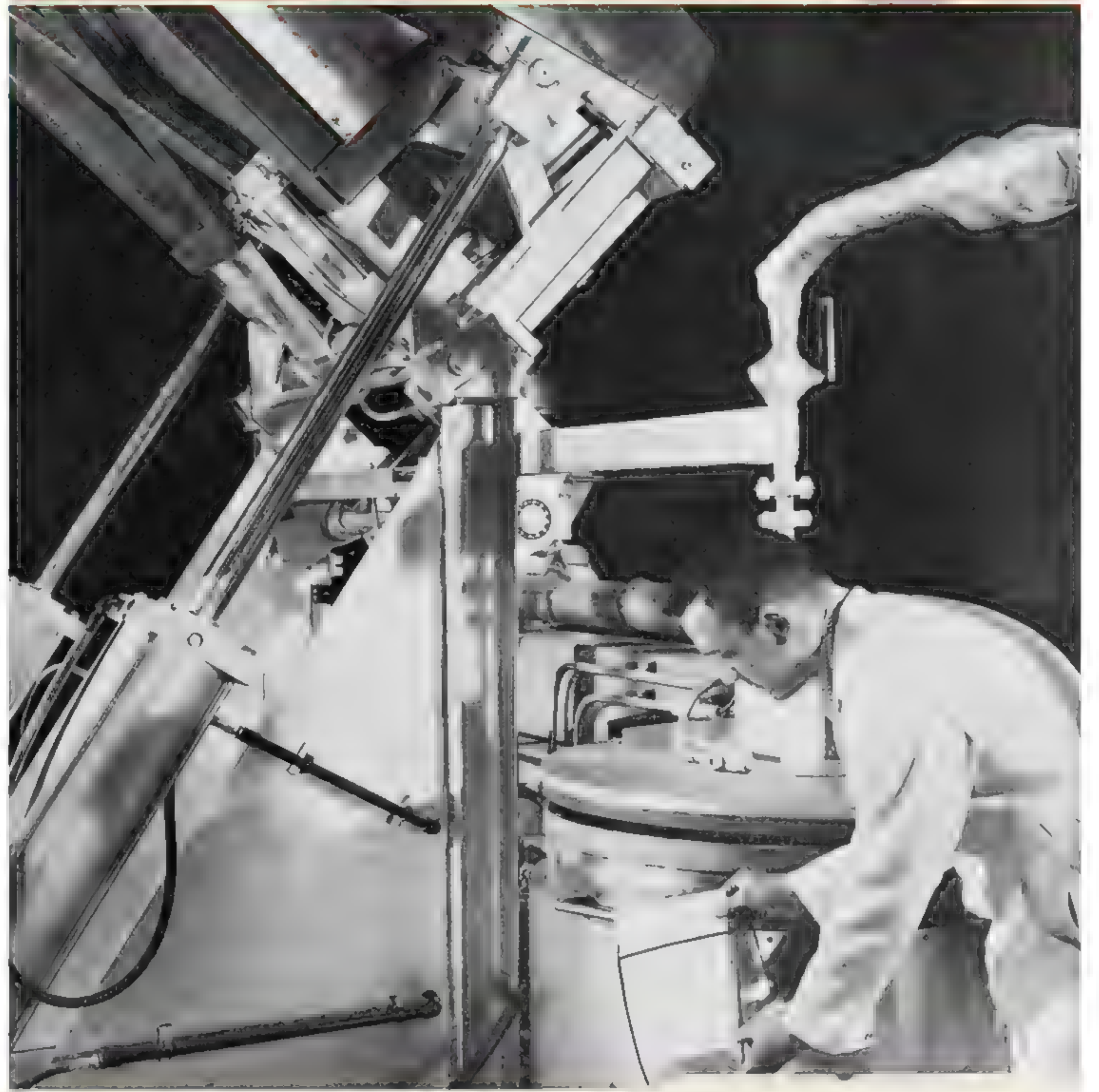
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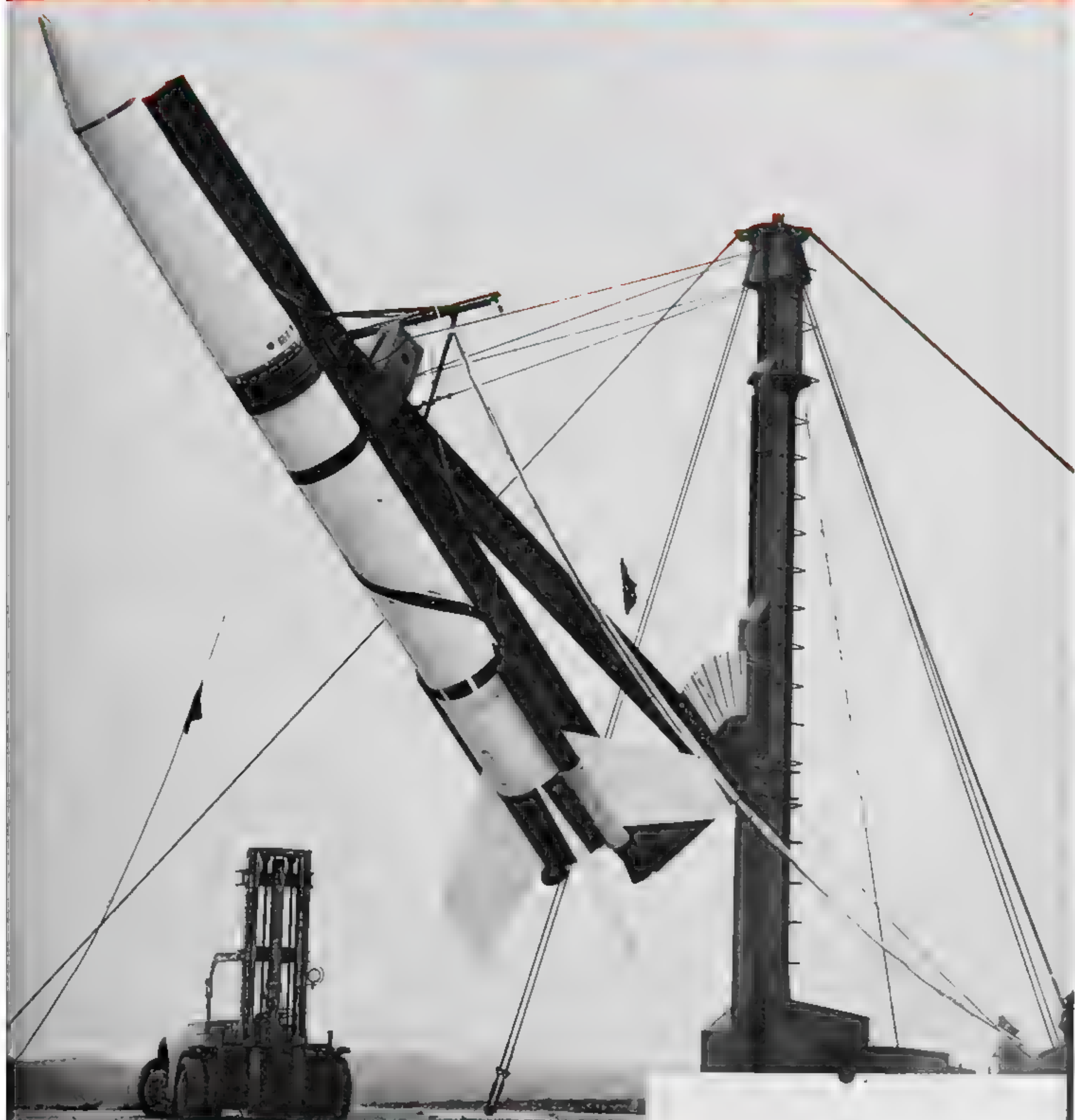
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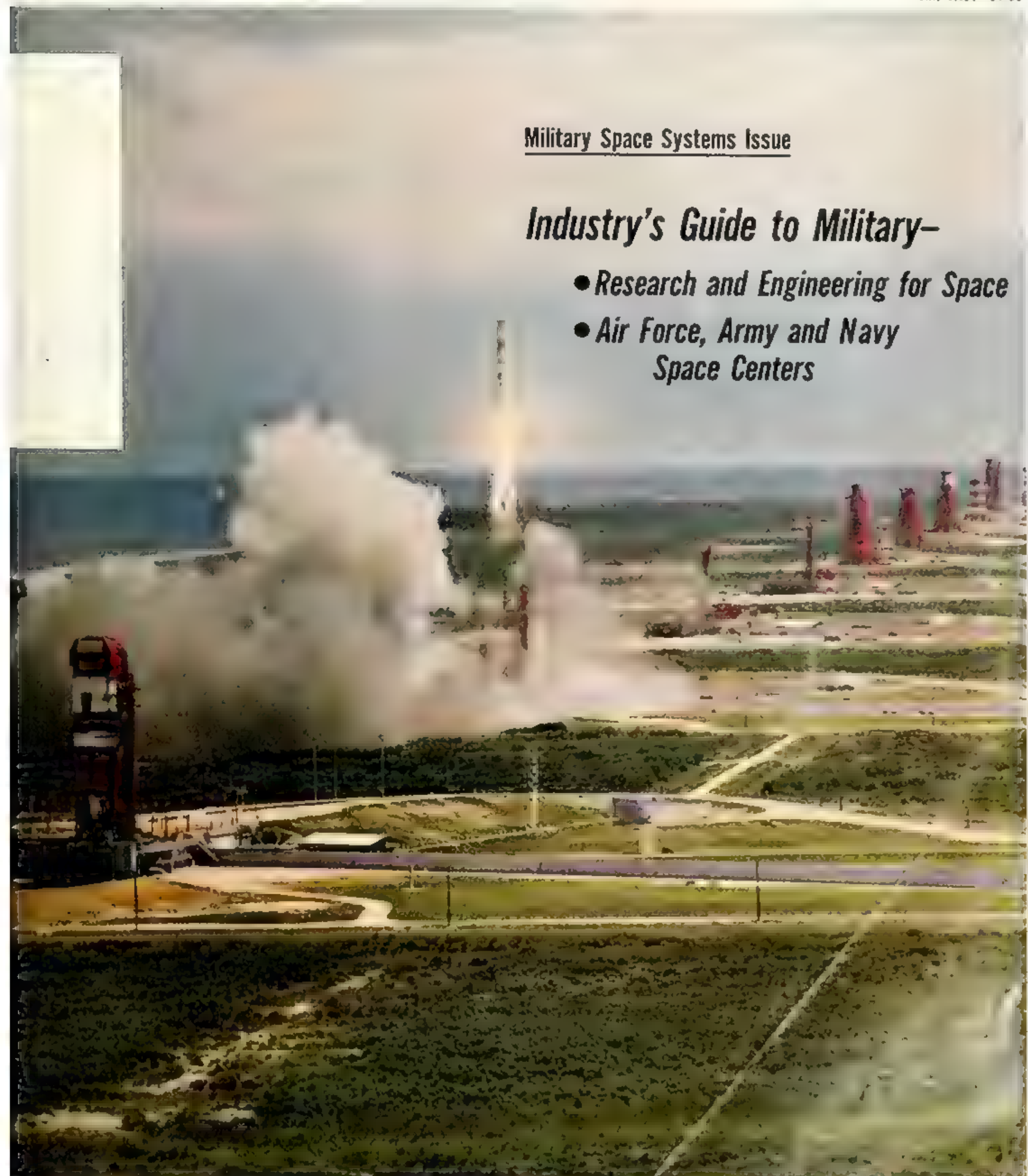
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MARCH 26, 1962

missiles and rockets

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AMERICAN AVIATION PUBLICATION

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Military Space Systems Issue

Industry's Guide to Military—

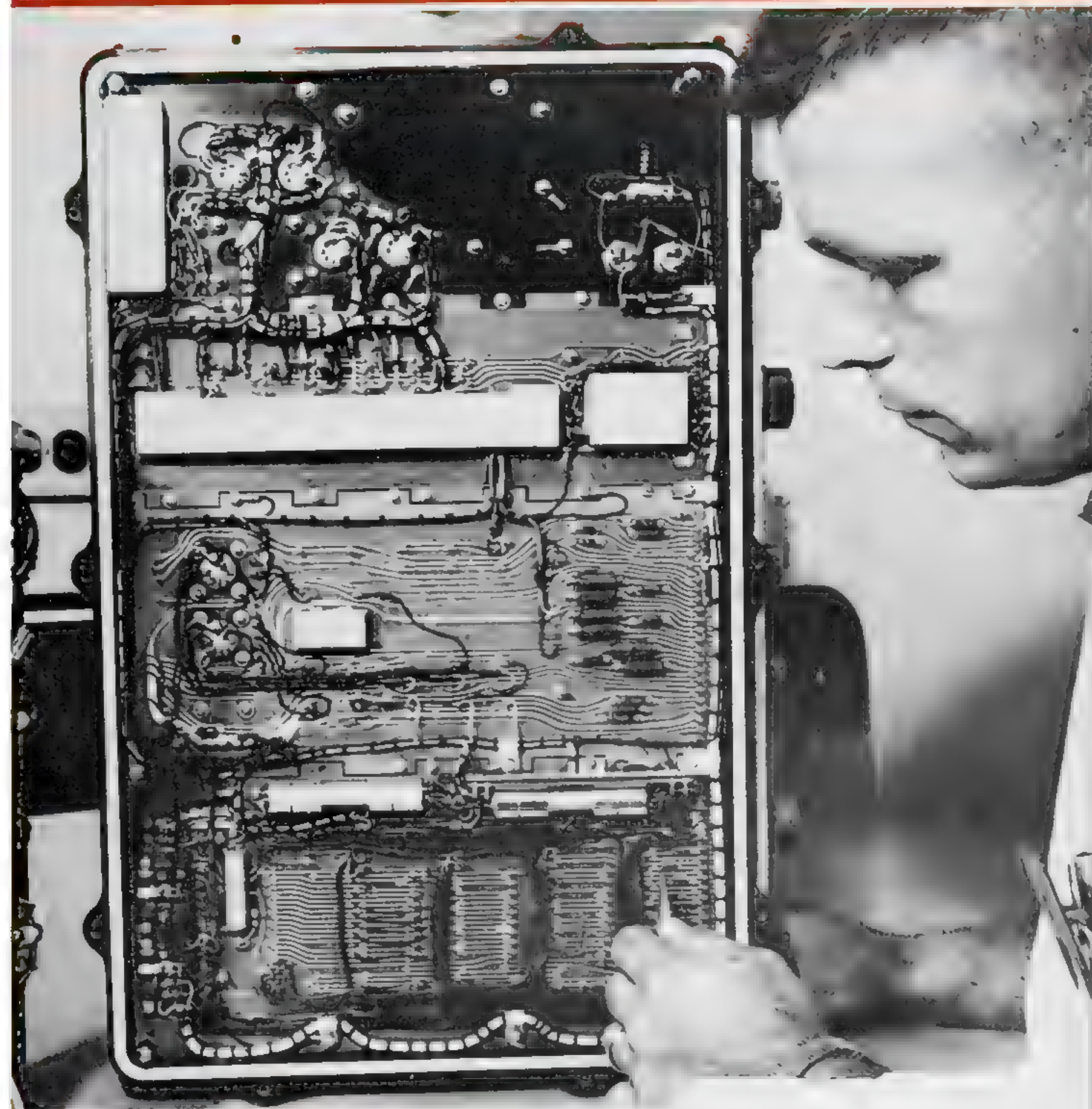
- Research and Engineering for Space
- Air Force, Army and Navy Space Centers

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APRIL 2, 1962

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Birth of a Motor Case—Glass Filament Production

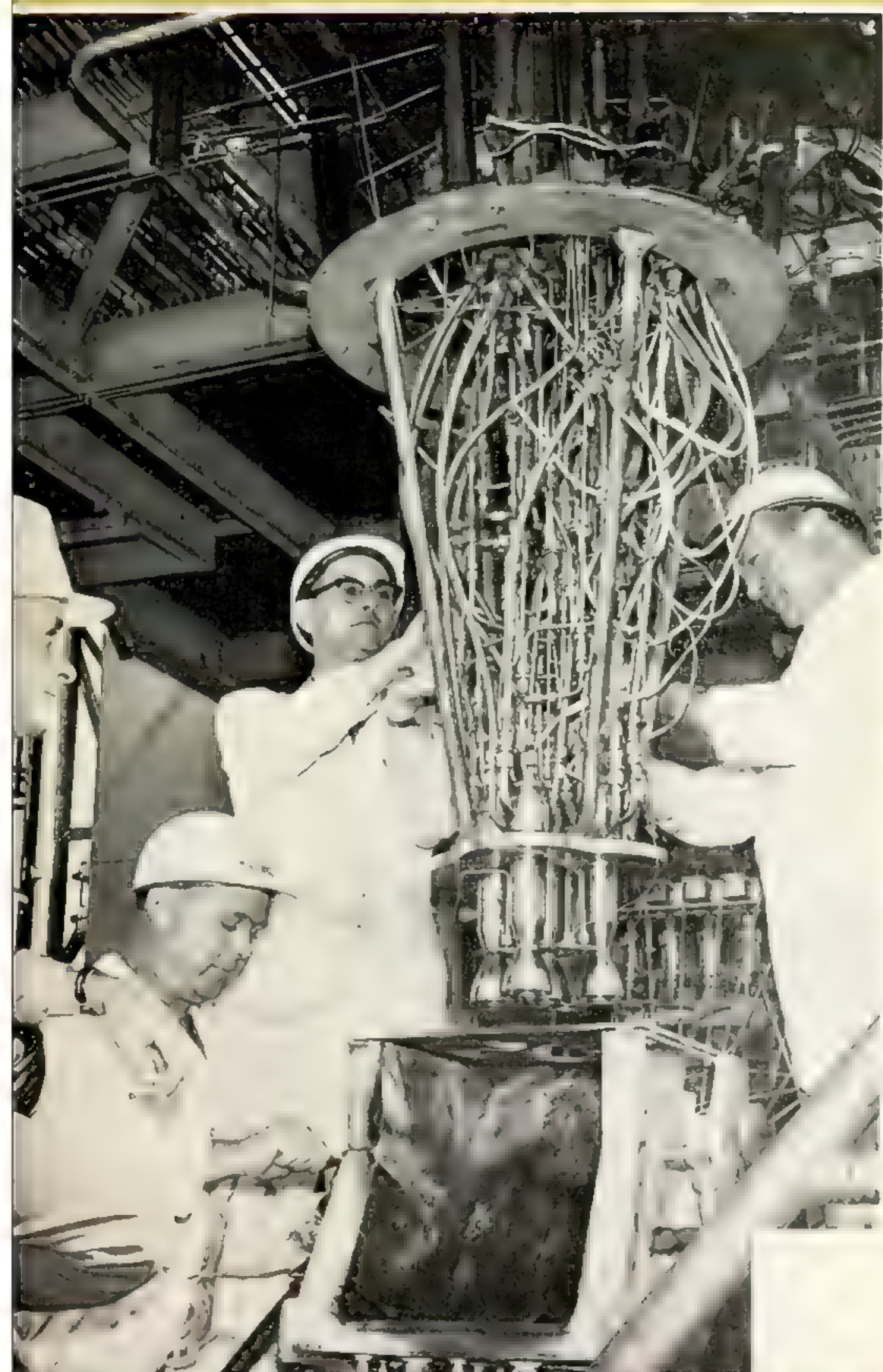
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U.S. Will Build New 'Aerospace' Plane in 1965

- **First Phase**
Designing Engine
- **Second Phase**
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- **Third Phase**
Manufacture

Saturn C-5 Model Engine:

AN AMERICAN AVIATION PUBLICATION

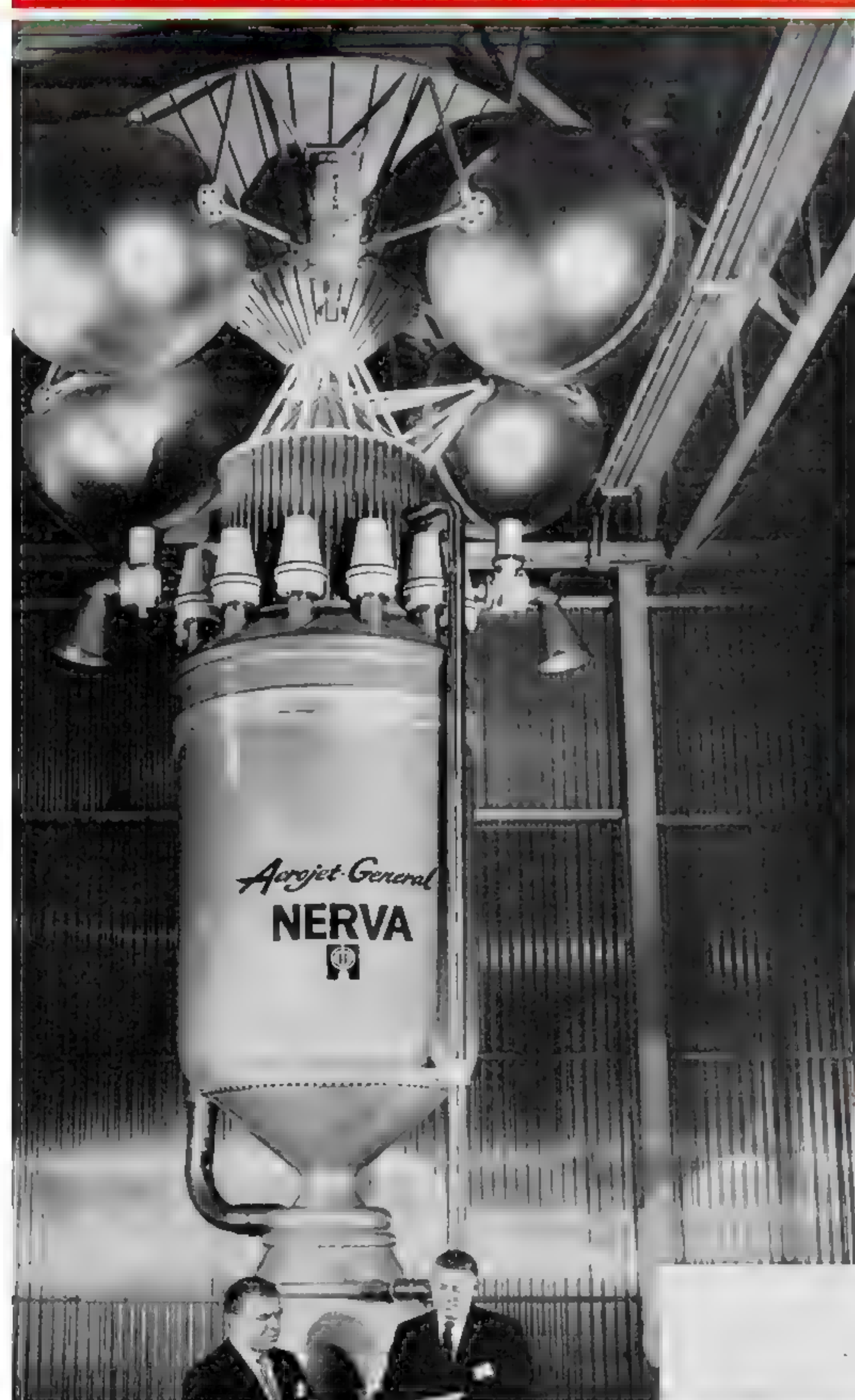
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Assembling Prototype ANNA Satellite

East-West Cooperation Talks Intensify . .
S-4 Static Firing Next Test for Saturn . .
How Boeing Won Big Saturn Award . .

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COSPAR Hears U.S., USSR Space Launching Plans

- **NASA Plans**
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- **Five Firms**
Bidding on Nova
- **Latest Edition**
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Aerojet's NERVA Mock-up

AN AMERICAN AVIATION PUBLICATION

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Conalog' Display for Safe Lunar Landing

JTC Picked to Build 120-in. Solid
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Conalog' Proposed for Space Pilots

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missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



SPECIAL REPORT ON APOL

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missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Saturn SA-5 Mock-up Gets Tail Fins
Secret' Satellite Orbits Disclosed
Nuclear Rocket Program Hits Delay
Five Missiles May Use Gas Gyro

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missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Electro-Optical Doubles Solar Panel Output
156-in. Glass Motor Case Award Nears .
NASA Ponders Six-Orbit MA-8 Flight . . .
Twelve Surveyors To Explore the Moon .

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missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



F-1 Engine's First Full-Thrust, Full-Duration Firing
NASA Leans Toward Lunar Orbit Choice .
McNamara List Forebodes Budget Changes
Report on A.C. Spark's Metrology Labs . . .

1962_06_11_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Army's Ryan 124-E Jet Target Drone
DOD Replacing Advent With Two ComSc
SPECIAL REPORT
U.S. Presses Plans for Man on Moon

1962_06_18_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Military
Space Fight
Continues
Unabated

- F-105 Still Flying
(10 One-Cat Entry)
- F-105 Still Flying
(10 One-Cat Entry)
- F-105 Still Flying
(10 One-Cat Entry)

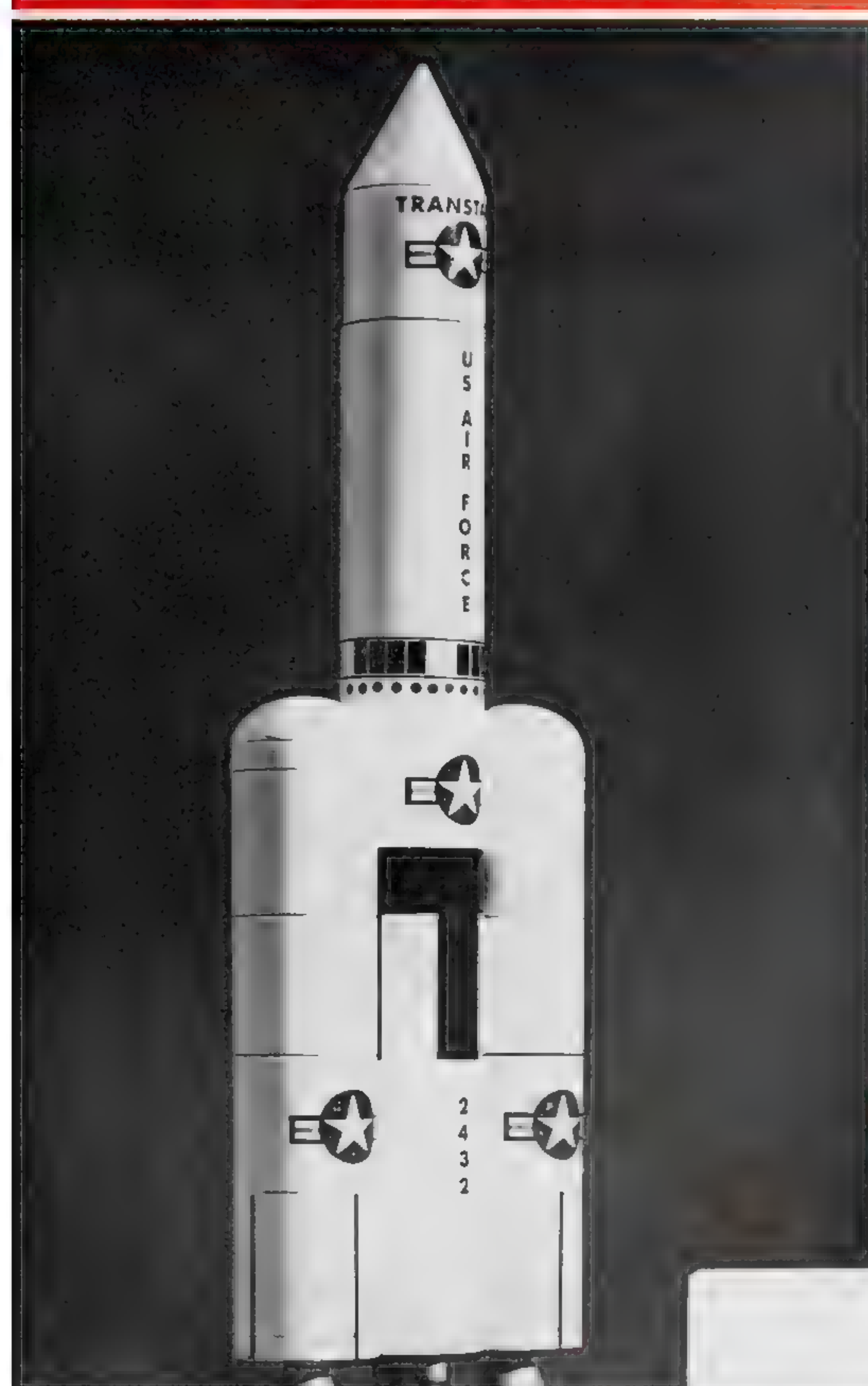
Pershing Reaches
Activation

AN AMERICAN AVIATION
PUBLICATION

1962_06_25_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



NASA
Plans New
High-Energy
Engine in
FY 1964

- SNAP-50 Is
Still Snafu'd
- Process May
Hike Solid I_{sp}
- Latest Edition
Of M/R Astrolog

First Model of
Full Titan III

AN AMERICAN AVIATION
PUBLICATION

1962_07_02_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Experimental Minuteman Glass Motor Case at Lamtex

NASA Chooses Lunar-Orbit Rendezvous . . .
Telstar To Be First Active ComSat
Filament-Wound Case Market Grows

1962_07_09_Missiles_Rockets.jpg



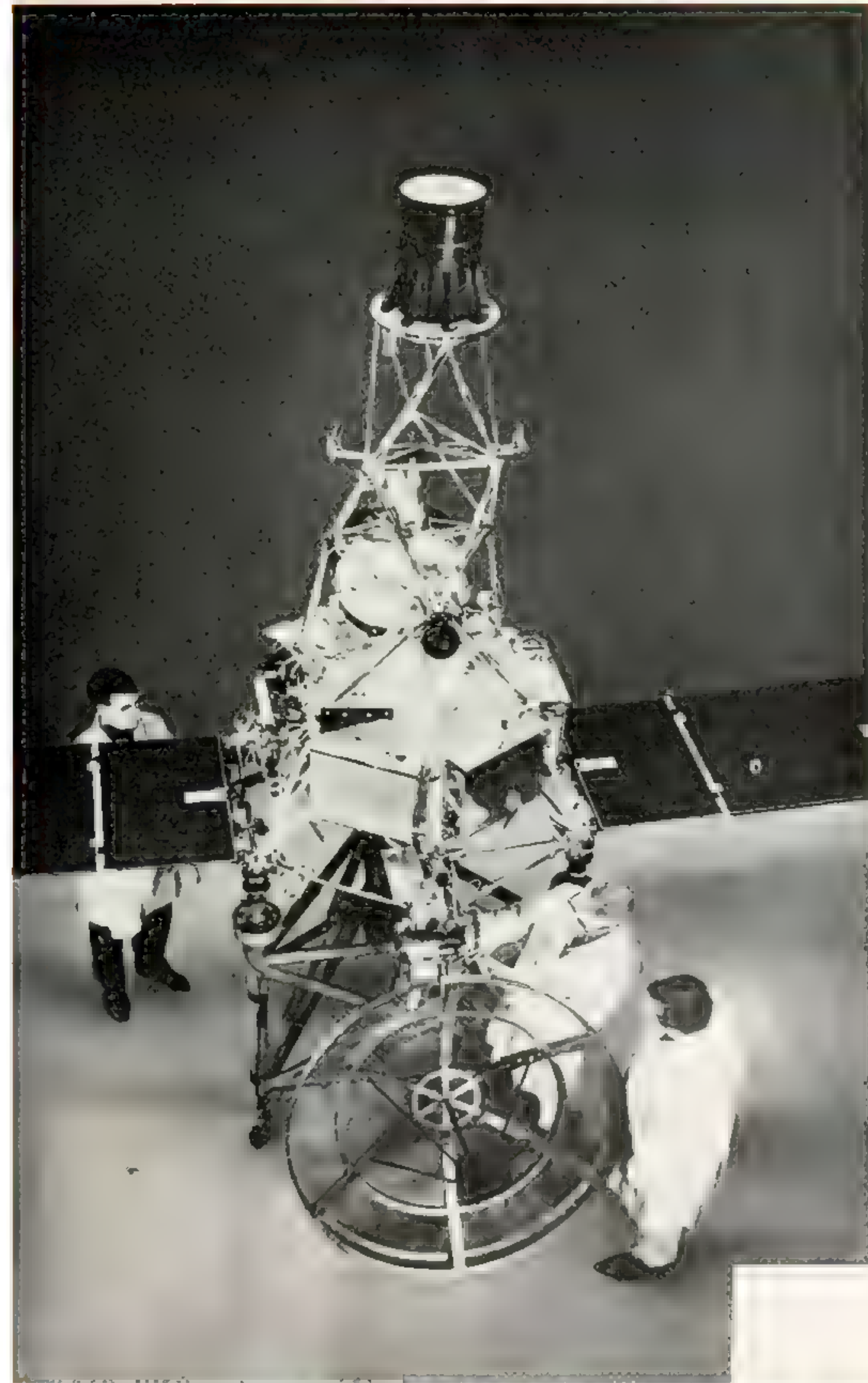
MIDAS In Trouble, Re-orienting Under Way

- Early Telstar Success Hailed
- UK-1 Uncovers Some Surprises
- UTC Still in 156-in. Contest

Telstar Takes Off

AN AMERICAN AVIATION PUBLICATION

1962_07_16_Missiles_Rockets.jpg



Who'll Be Manager Of SPUR- SNAP-50?

- Complex Set For Saturn C-5
- Mariner First Big Planet Probe
- A-Firing for Davy Crockett

Final Check of Mariner

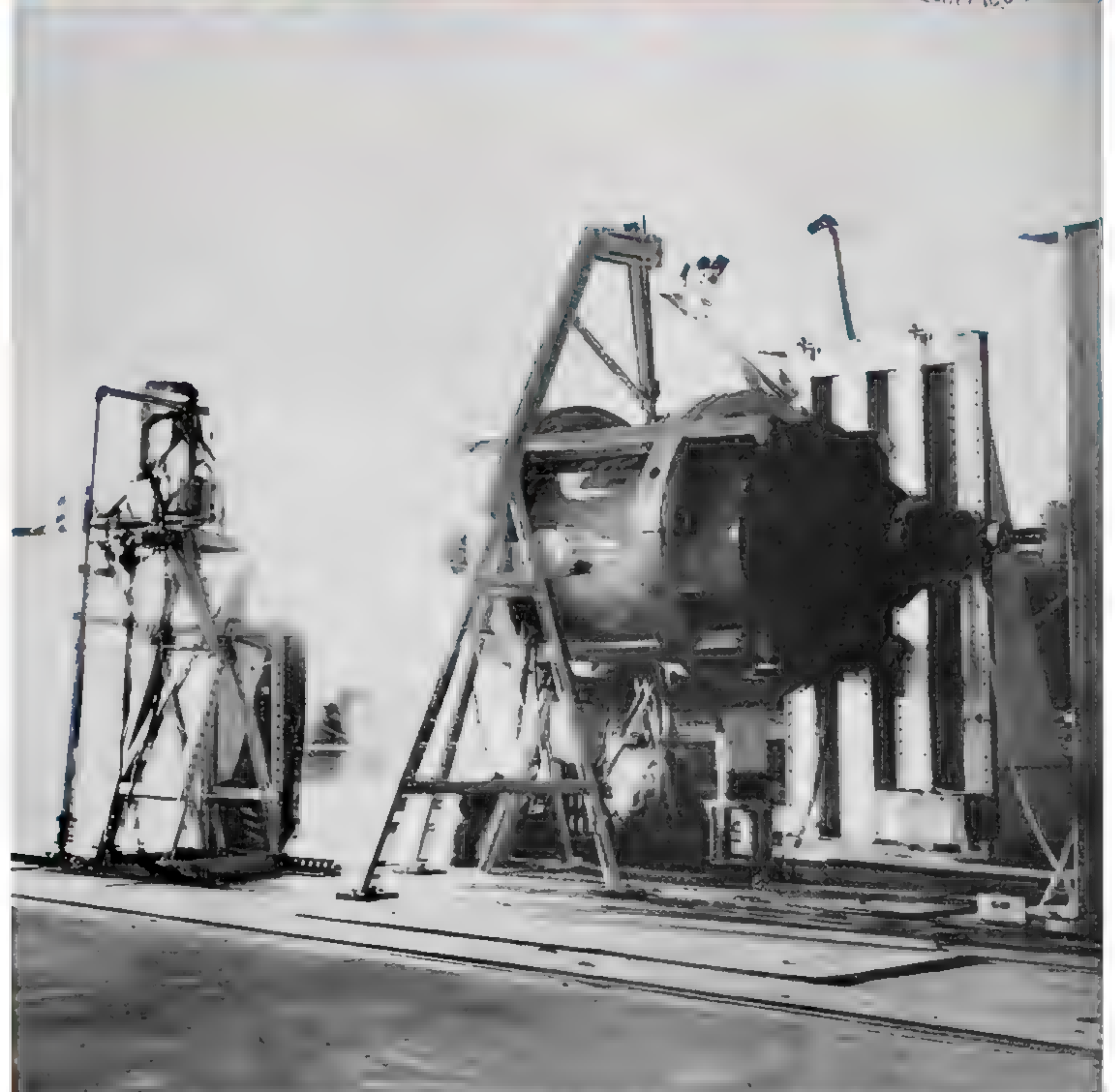
AN AMERICAN AVIATION PUBLICATION

1962_07_23_Missiles_Rockets.jpg



Sixth Annual
World Missile/Space
Encyclopedia

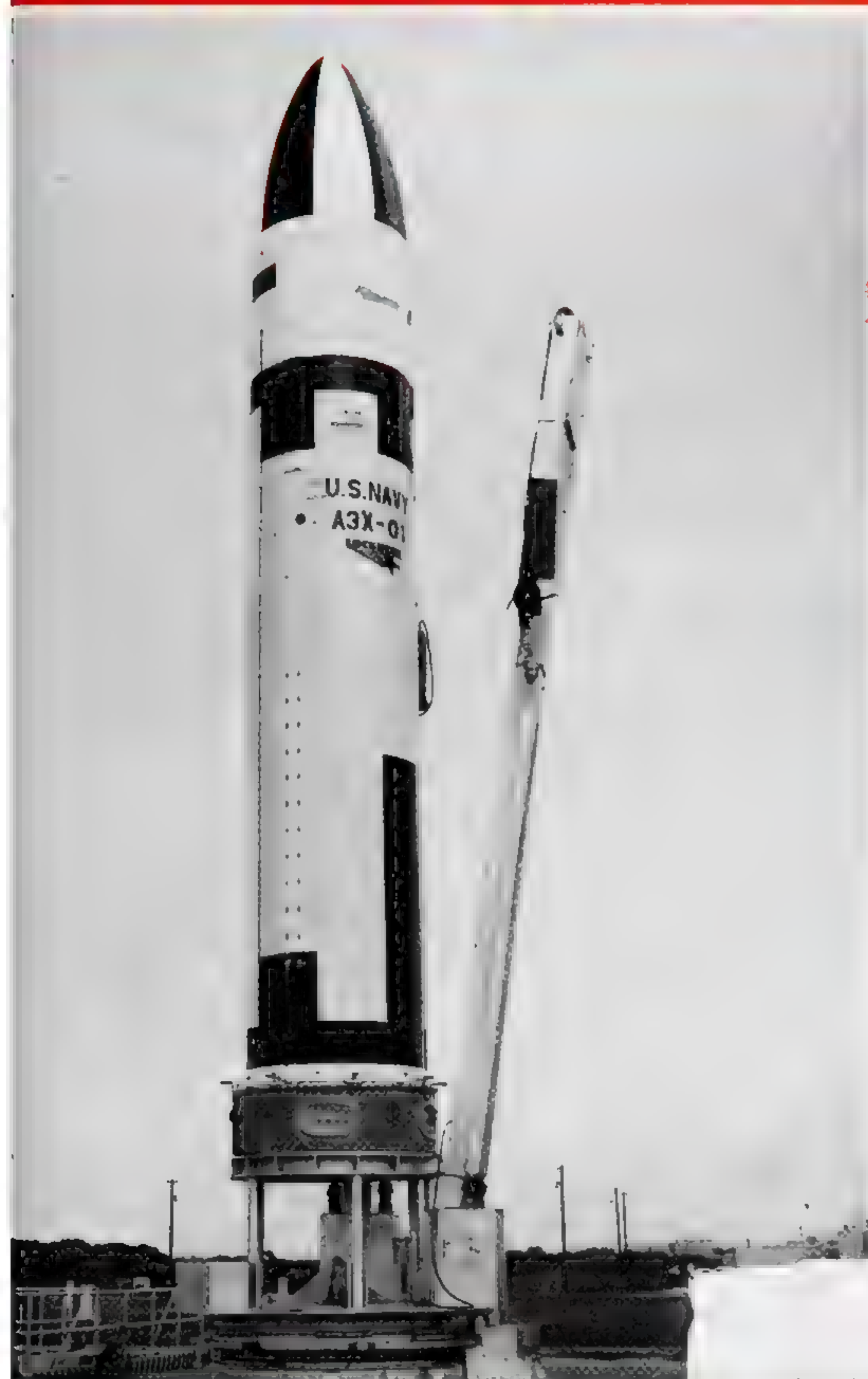
1962_07_30_Missiles_Rockets.jpg



Test-firing Minuteman Third Stage

- NASA May Stretch Gemini to 5 Years . . .
- Large Minuteman Engine Plants in Utah . .
- F-66 To Chart Ionosphere in '63

1962_08_06_Missiles_Rockets.jpg



Bids on LLSV Studies Expected Next Week

- Big Solid Awards in 60 Days?
- Polaris Moves Into A3 Phase
- Goodyear's Space Structure

First Photo of Polaris A3

AN AMERICAN AVIATION PUBLICATION

1962_08_13_Missiles_Rockets.jpg



U.S. Plans No 'Crash' Spending to Catch Up With Soviets

- DOD Approves Titan III Program
- Project Hi-Hoe Launch Succeeds
- Missile B Studies Awarded

Cosmonauts Nikolayev (top) and Popovich

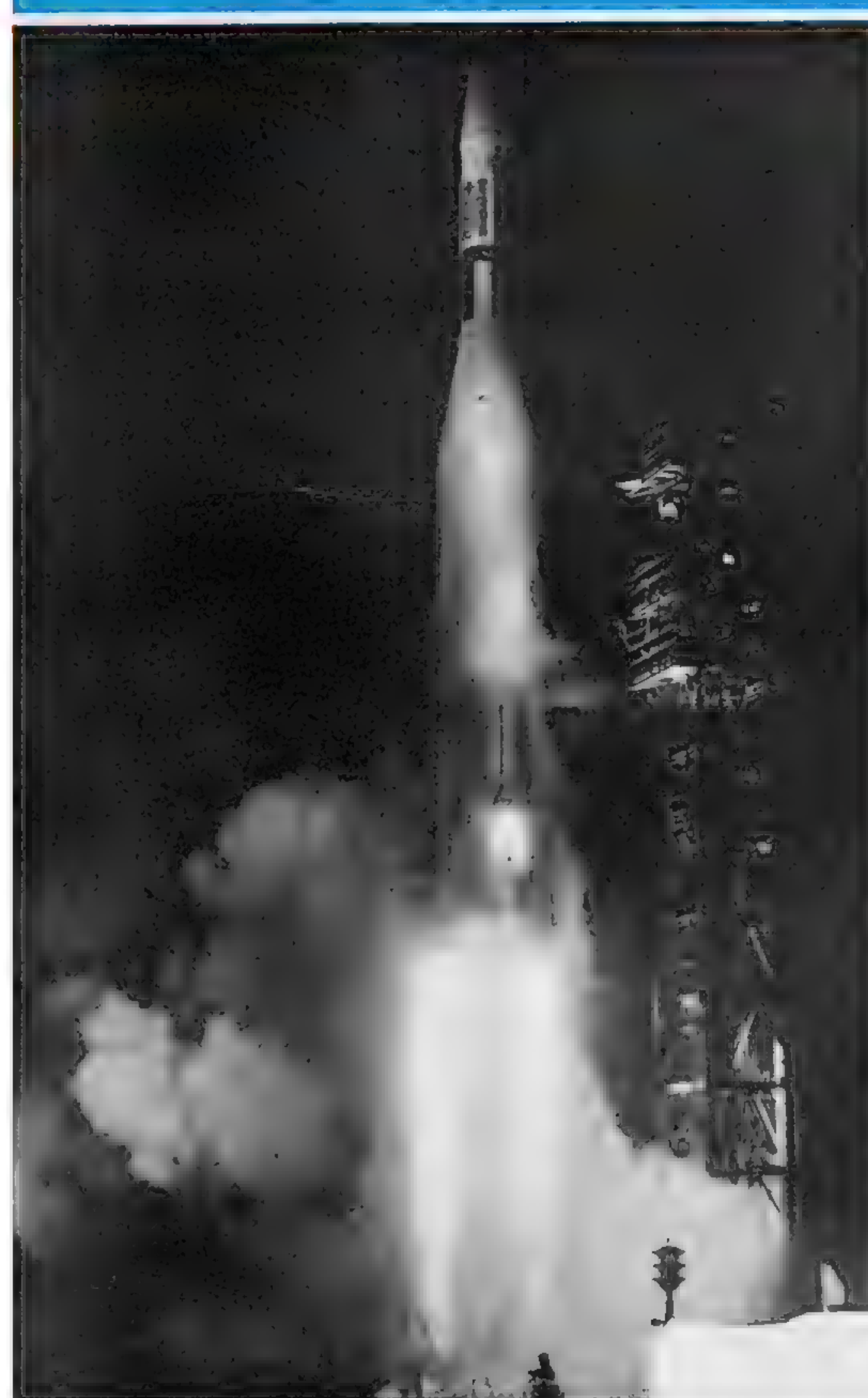
AN AMERICAN AVIATION PUBLICATION

1962_08_20_Missiles_Rockets.jpg



Titan II Guidance to be Modified for Titan III
NASA/AF Group Planning ASP Program . . .
Debate Intensifies over Vostok Flights . . .
Avco Develops 3-D Space Tracker . . .

1962_08_27_Missiles_Rockets.jpg



Air Force Studying Space Trainer

- Report on Mariner II
- Gemini Vehicle Assembly Line
- Latest Edition Of M/R Astrolog

Launch of Mariner II

AN AMERICAN AVIATION PUBLICATION

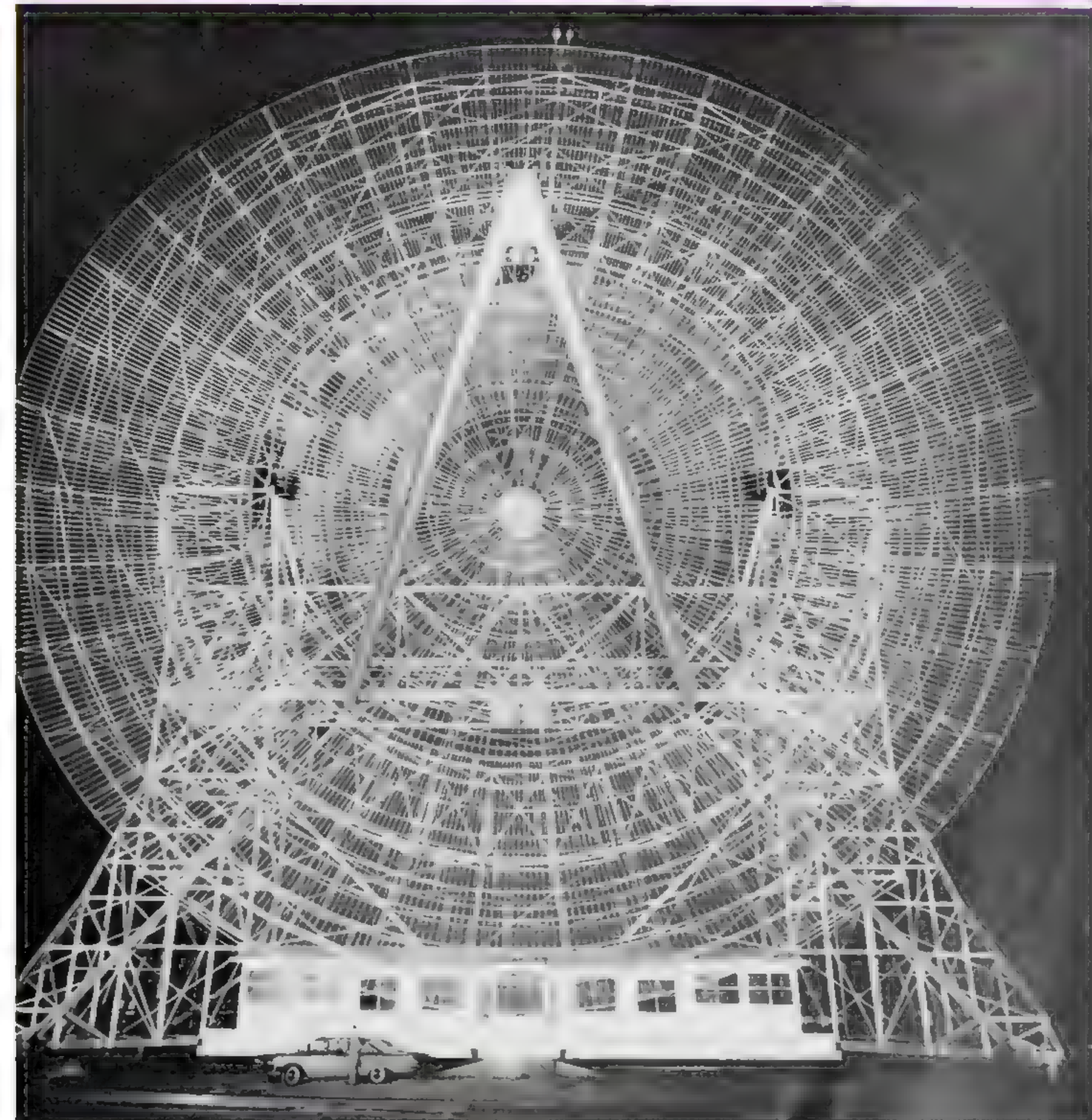
1962_09_03_Missiles_Rockets.jpg



Douglas Skybolt on Vulcan Bomber

Nine Firms Bid on Lunar Module . . .
Missiles At Farnborough Exhibition . . .
Fairchild Develops Steam Rocket

1962_09_10_Missiles_Rockets.jpg



SPACE ELECTRONICS REPO

1962_09_17_Missiles_Rockets.jpg



Details Of \$7-Billion '64 Space Budget

- AEC Becomes Space Agency
- AF Steps Up Space Campaign
- Delta Booster Role Expands

First Photo: GAM 83B

AN AMERICAN AVIATION PUBLICATION

1962_09_24_Missiles_Rockets.jpg



First Photo of Moon's True Shape

Gemini Spending Expected To Rise
More Dyna-Soar Details Disclosed
New Space Electronic Products

1962_10_01_Missiles_Rockets.jpg



Early 24-Hr. Flight Will Follow MA-8 Success

- DX Priority Seen for Centaur
- DOD Broadens Procurement Base
- Soaring Apollo Costs Attacked

Astronaut Walter Schirra

AN AMERICAN AVIATION PUBLICATION

1962_10_08_Missiles_Rockets.jpg

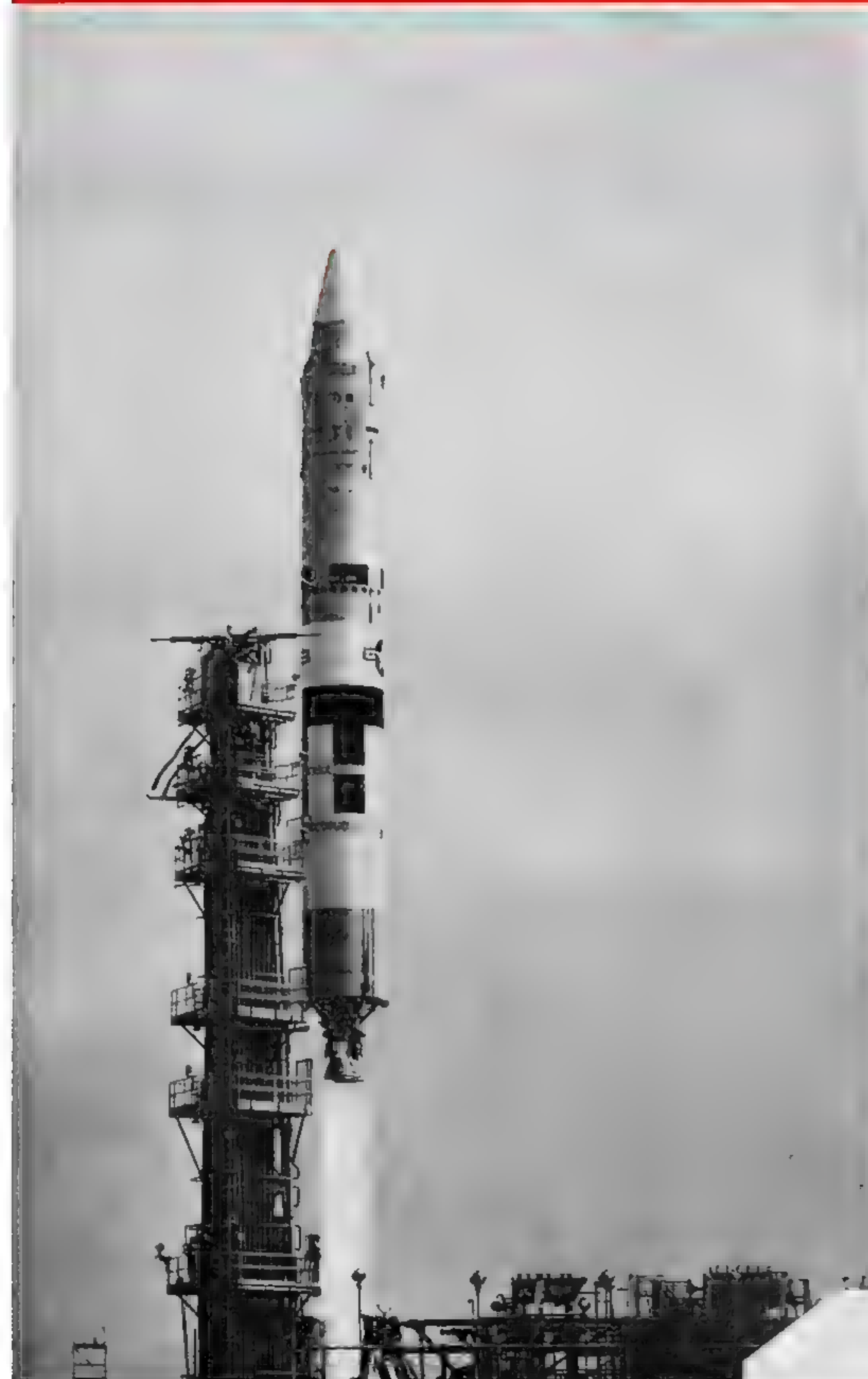


First Details of Advanced Minuteman

- Industry Acts On Apollo Costs
- 'Metalastic' Moon Rover Design
- Fusion Concept Wins M/R Award

Chance Vought's Lunar Landing Simulator

1962_10_15_Missiles_Rockets.jpg



McNamara Outlines DOD Space Plans

- NASA Sticks To Lunar Orbit
- Paring Apollo Guidance Price
- Problems for 'Spy' Satellites

Titan II Takes Off
On 5000-mile Flight

1962_10_22_Missiles_Rockets.jpg



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- DETAILS OF RED MISSILES IN CUBA 12
- Beech Drives to Win More Space Work . . 24
- Decision Looms for Project Orion 2

1962_10_29_Missiles_Rockets.jpg

NOVEMBER 5, 1962

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



S-IV Saturn Stage Heads for Alabama

ARPA Pushes Hybrid Rocket Research ...

Future of ANNA Remains in Doubt.....

Latest Edition of M/R's Astrolog

1962_11_05_Missiles_Rockets.jpg

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Details of S-66 Laser Tracking..... 1

Long-Duration Mach 15 Tunnel Shown ... 3

1962_11_12_Missiles_Rockets.jpg

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missiles and rockets

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Carl Zeiss Projector Used by Astronauts

Special Report from ARS Meeting 14

New Encouragement for AF Space Role

Earl Siegler Drives to Double Sales...

1962_11_19_Missiles_Rockets.jpg

NOVEMBER 26, 1962

missiles and rockets

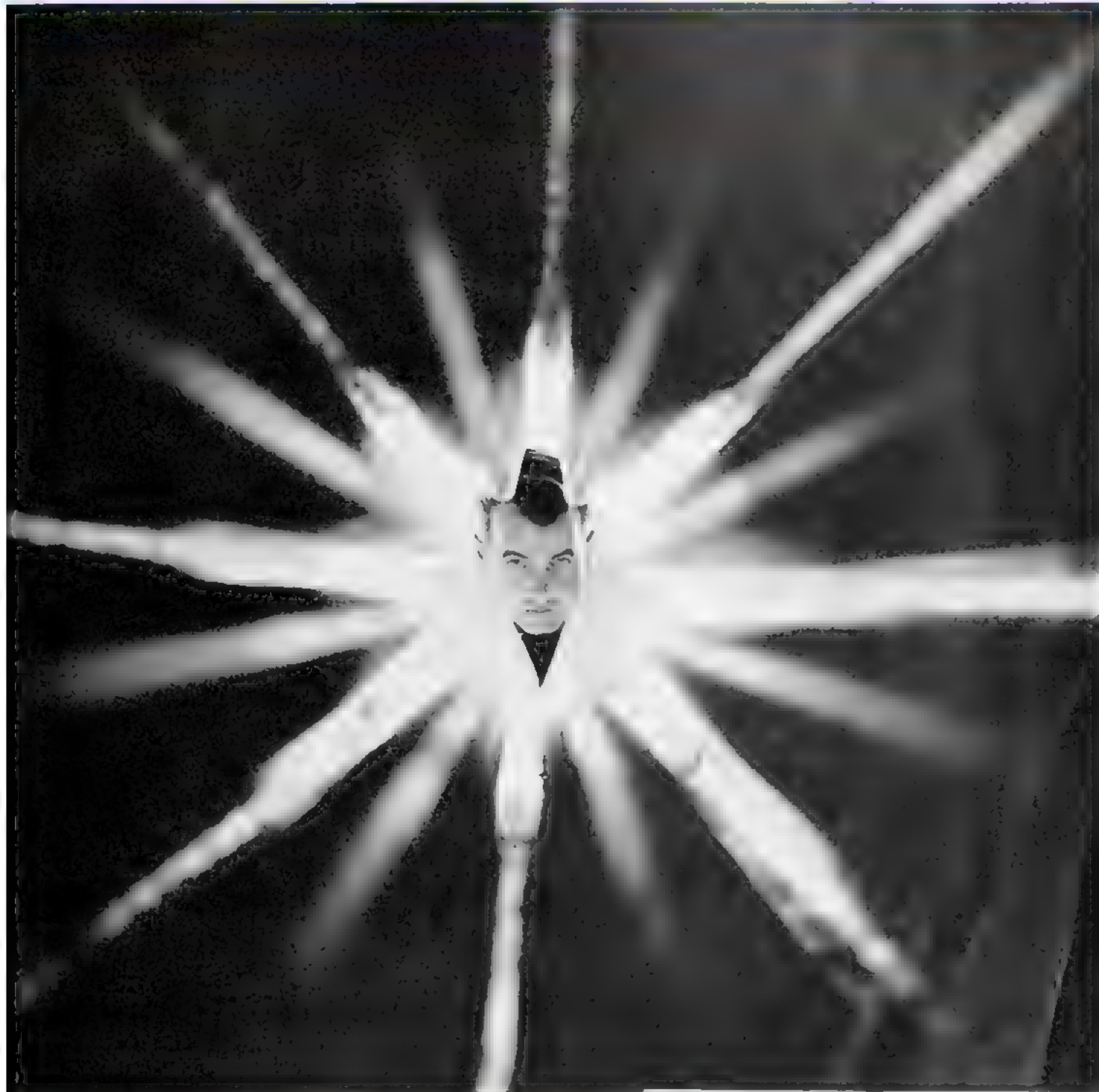
THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Second Annual NASA Issue

1962_11_26_Missiles_Rockets.jpg

DECEMBER 3, 1962



Inspecting Lockheed Grain

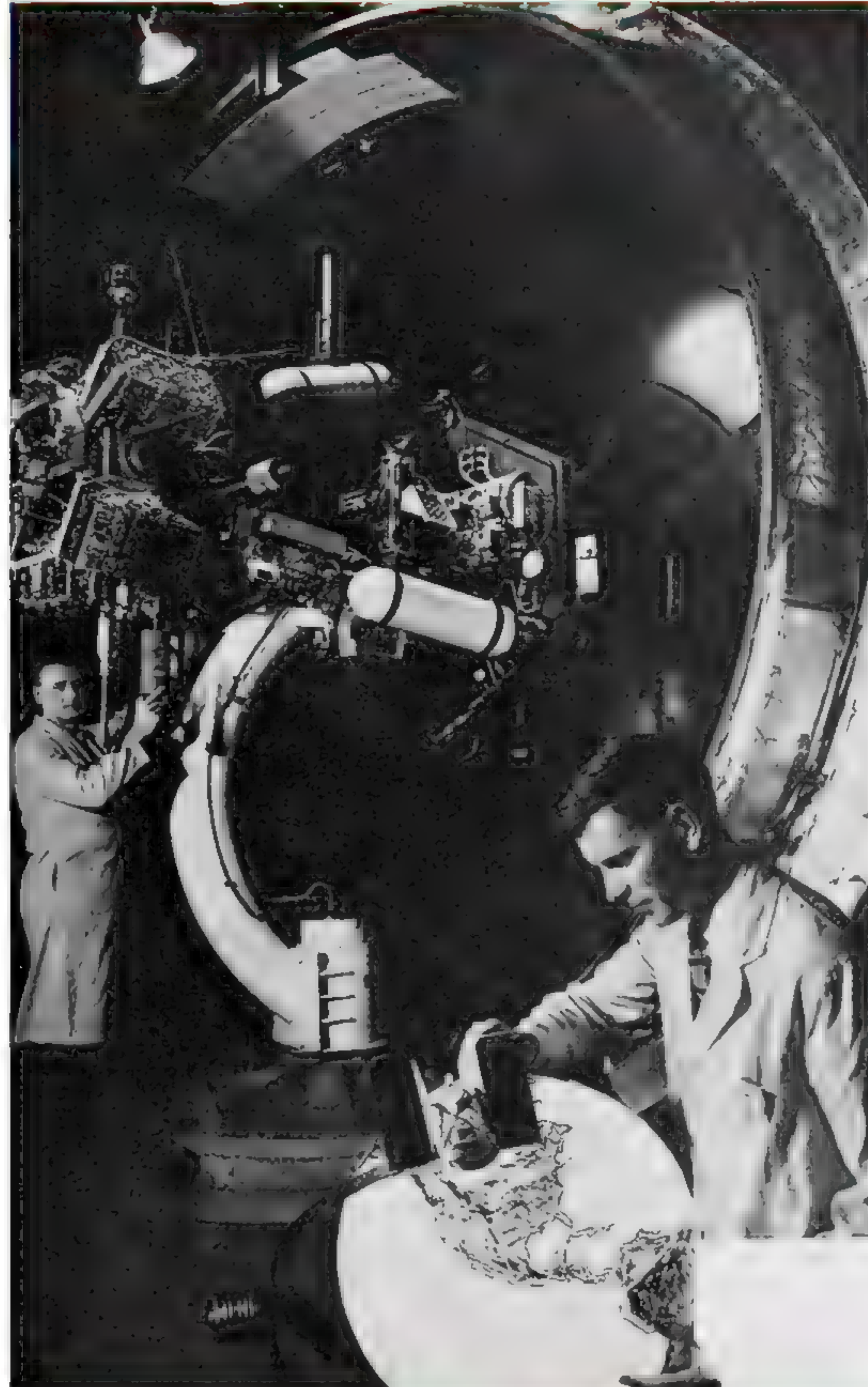
Super Hawk May Get Antimissile Role...

Congress Presses for AEC Shake-up....

Subsystem Kits Aid S-IVB Designers.....

1962_12_03_Missiles_Rockets.jpg

DECEMBER 10, 1962



SAINT
Reoriented
To
Advanced
System

● RFP's Nearing
For DOD ComSat

● SNAP Probe
Now Under Way

● Grumman
Gears Up
For LEM Work

Checking Nimbus Controls

1962_12_10_Missiles_Rockets.jpg

DECEMBER 17, 1962



Antenna on First Satellite Communications Ship

Minuteman Operational at Malmstrom...

NASA Sees Swelling Need for SNAP....

Army Satellites to Enhance Mapping....

1962_12_17_Missiles_Rockets.jpg

DECEMBER 24, 1962



Laser Rods Grow on EOS Tree

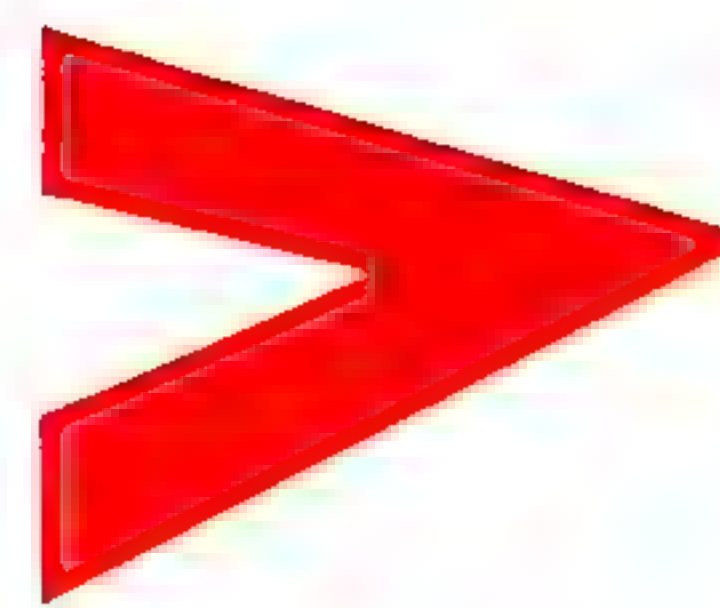
DOD Switches, Calls AICBM Feasible...

What Mariner Success Means for '64 ..

AF Ponders Big-Solid AGE Problems....

1962_12_24_Missiles_Rockets.jpg

missiles and rockets



MAGAZINE OF WORLD ASTRONAUTICS



Missiles and Rockets - Magazine of World Astronautics
Published by American Publications, Inc.
Washington D.C.

1963

Volume 12, No. 1-25 (January 7, 1963 to June 24, 1963)

Volume 13, No. 1-26 (July 1, 1963 to December 23, 1963)
(*Dec. 30, 1963 was not issued)

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



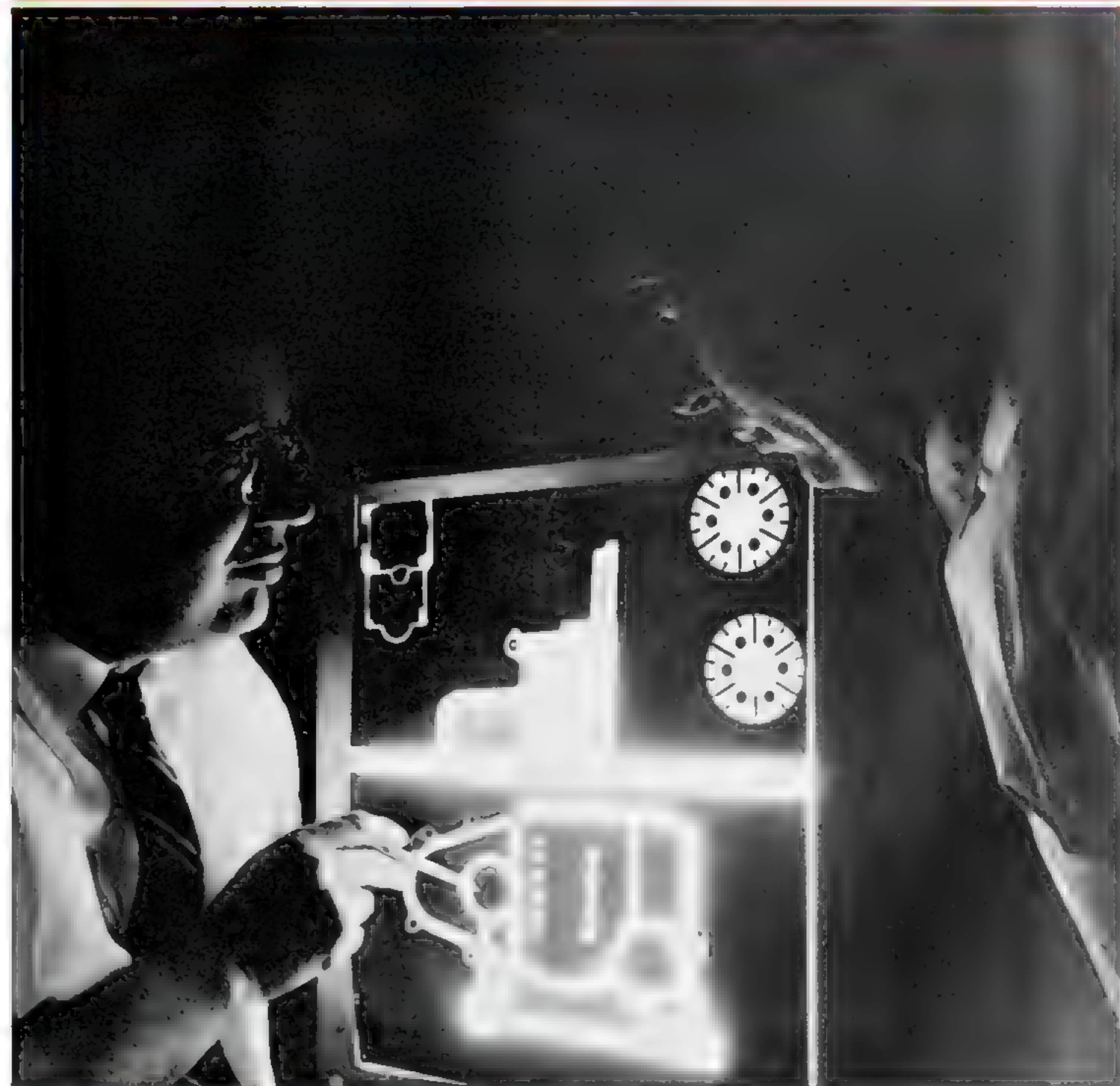
First Photo of Mauler Mockup

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1963_01_07_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



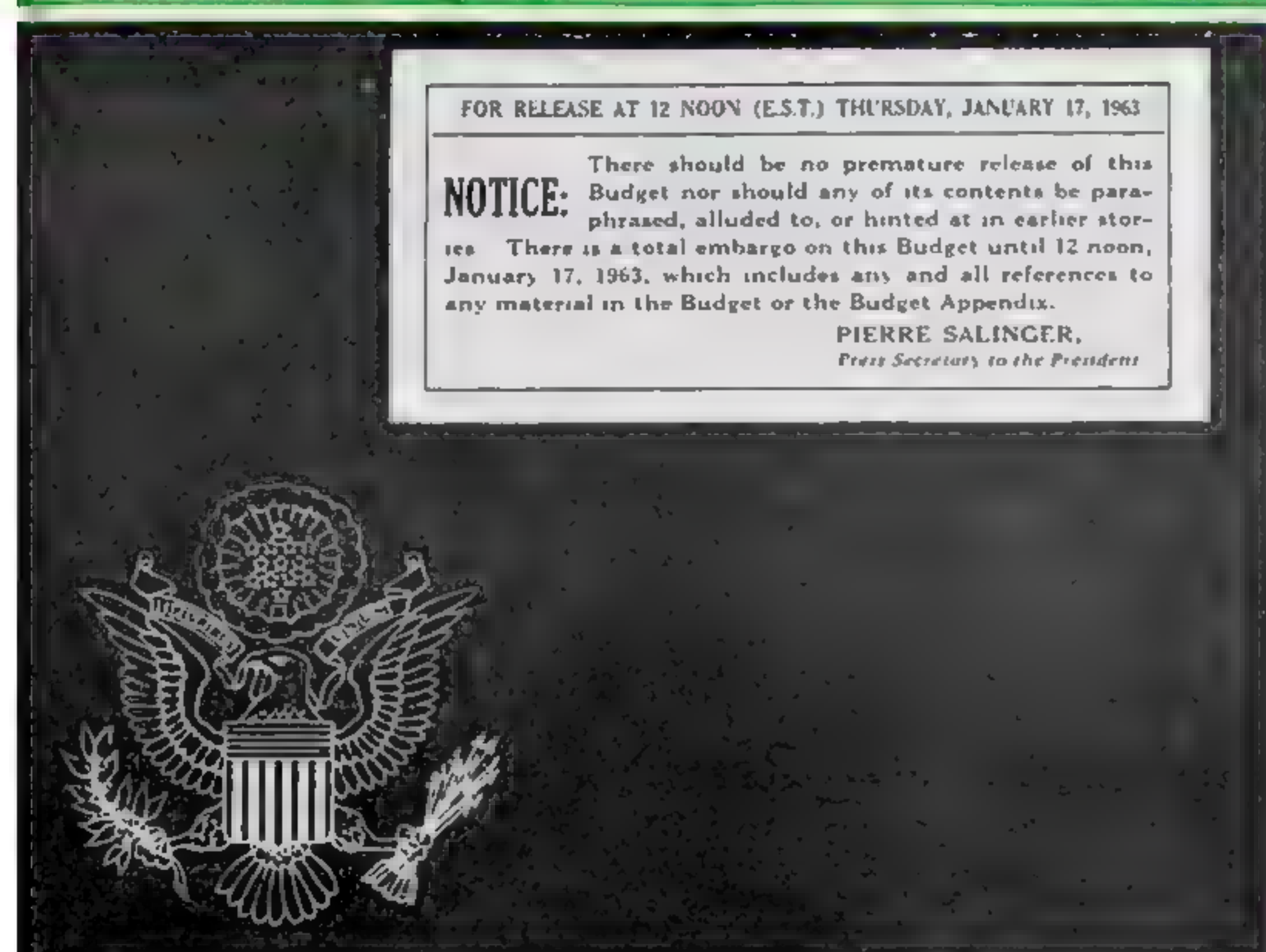
Learn Siegler's X-ray Checking Equipment

Final LLV Design To Be Set Shortly
 Telstar Repair May Have Wide Import...
 ASSET Launches Slated for Summer.....

1963_01_14_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



FOR RELEASE AT 12 NOON (E.S.T.) THURSDAY, JANUARY 17, 1963

NOTICE: There should be no premature release of this Budget nor should any of its contents be paraphrased, alluded to, or hinted at in earlier stories. There is a total embargo on this Budget until 12 noon, January 17, 1963, which includes any and all references to any material in the Budget or the Budget Appendix.
 PIERRE SALINGER,
 Press Secretary to the President

**Budget Asks
 \$18 Billion+
 For Missiles
 and Space**

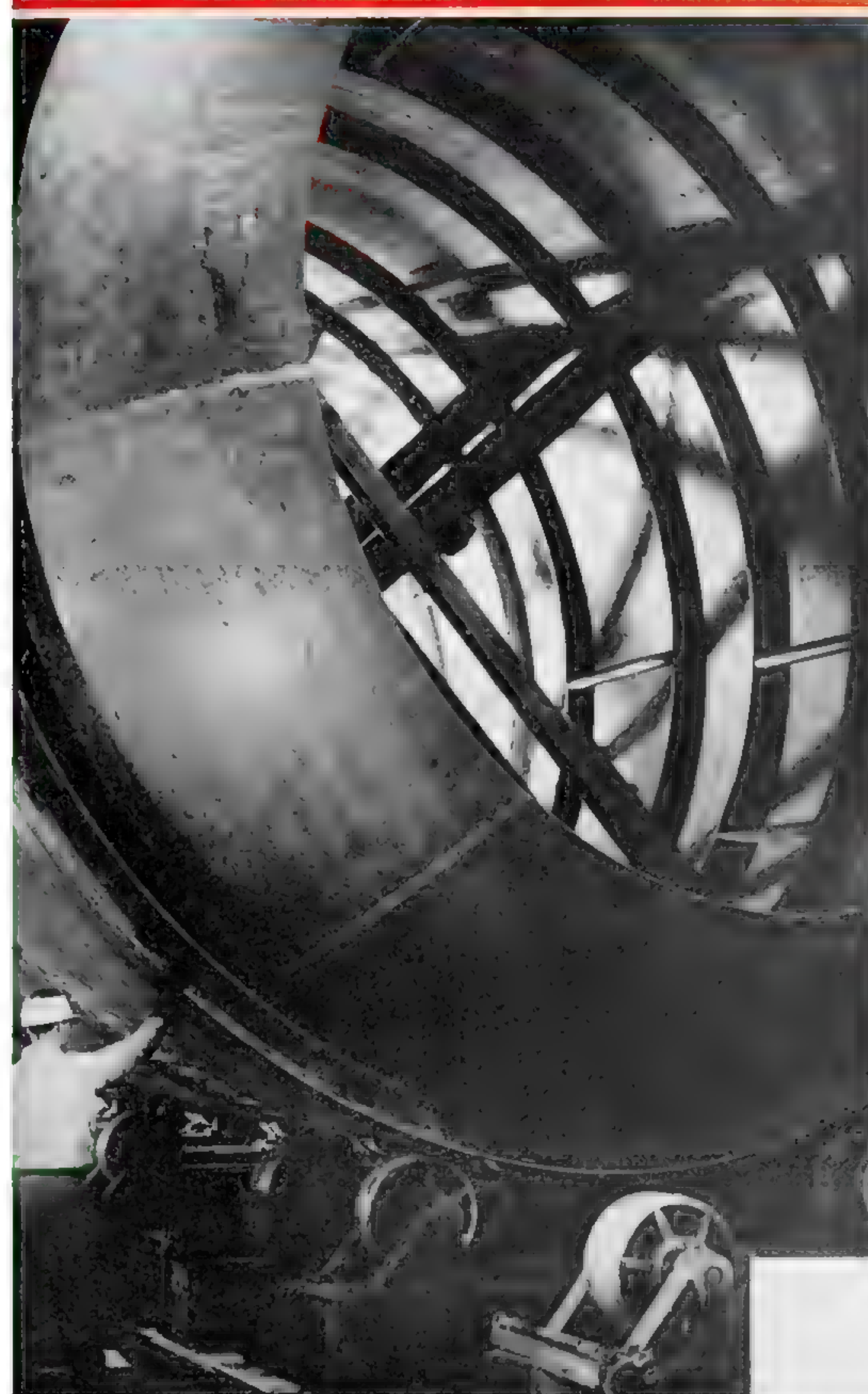
- Centaur Giver Top Priority
- R&D Indicates Asbestos Uses
- Chart Shows Cislunar Nature

Cover of FY '64 Budget

1963_01_21_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**DOD-NASA
 Gemini Pact
 Threatens
 Dyna-Soar**

- MIDAS Reverts To Study Phase
- New Life In Nike Program
- Emerson Swells Re-entry Art

Aerojet 280-in. Motor Case

1963_01_28_Missiles_Rockets.jpg

missiles and rockets
THE WEEKLY OF SPACE SYSTEMS ENGINEERING



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Raytheon's Tri-Mode Rendezvous Radar . .

1963_02_04_Missiles_Rockets.jpg

missiles and rockets
THE WEEKLY OF SPACE SYSTEMS ENGINEERING

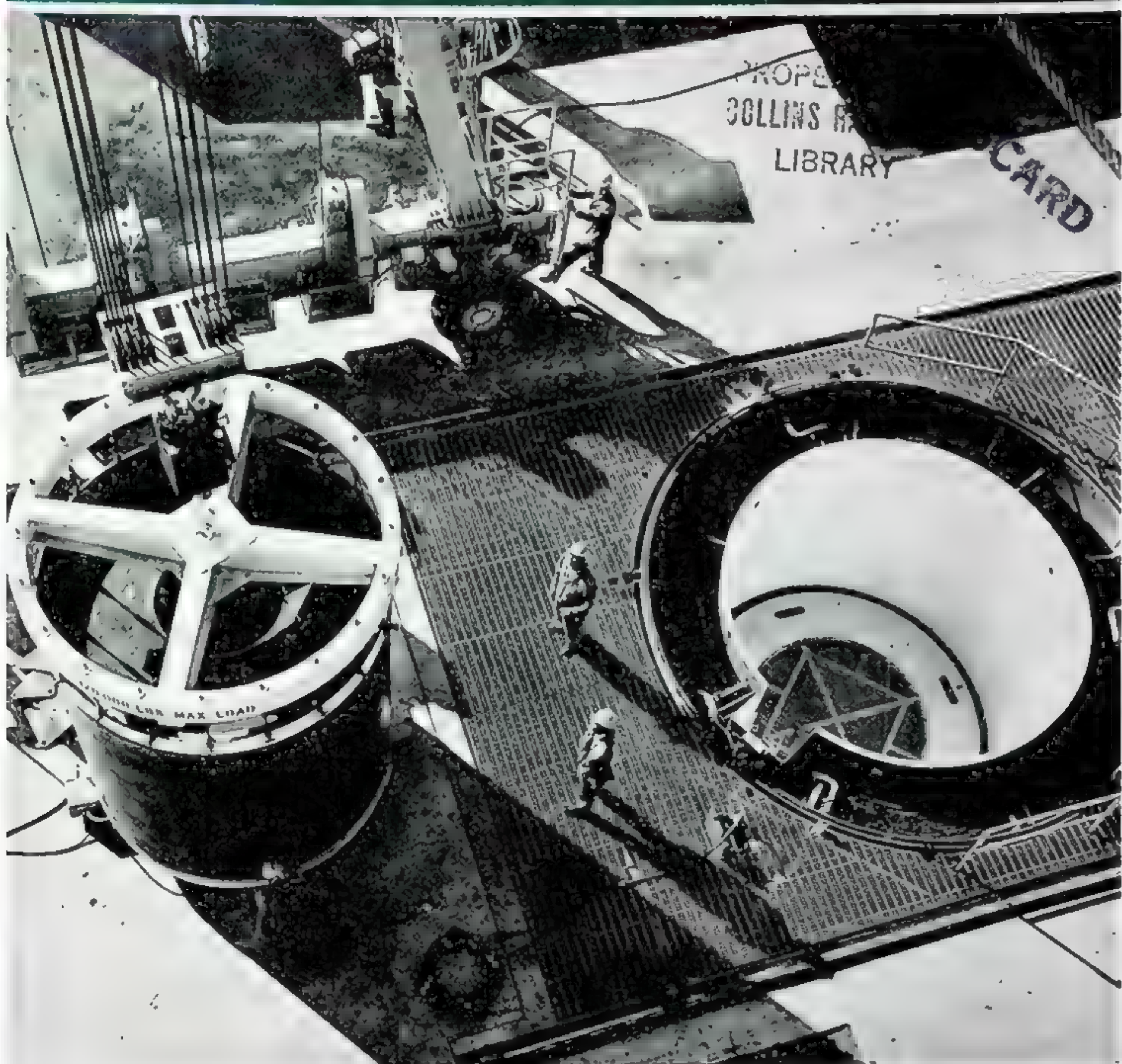


LPC Static-Tests Apollo Escape Motor

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Avco Attacks Re-entry 'Blackout' 2

1963_02_11_Missiles_Rockets.jpg

missiles and rockets
THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Huge UTC Motor Segment After Curing

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AN AMERICAN AVIATION PUBLICATION

1963_02_18_Missiles_Rockets.jpg

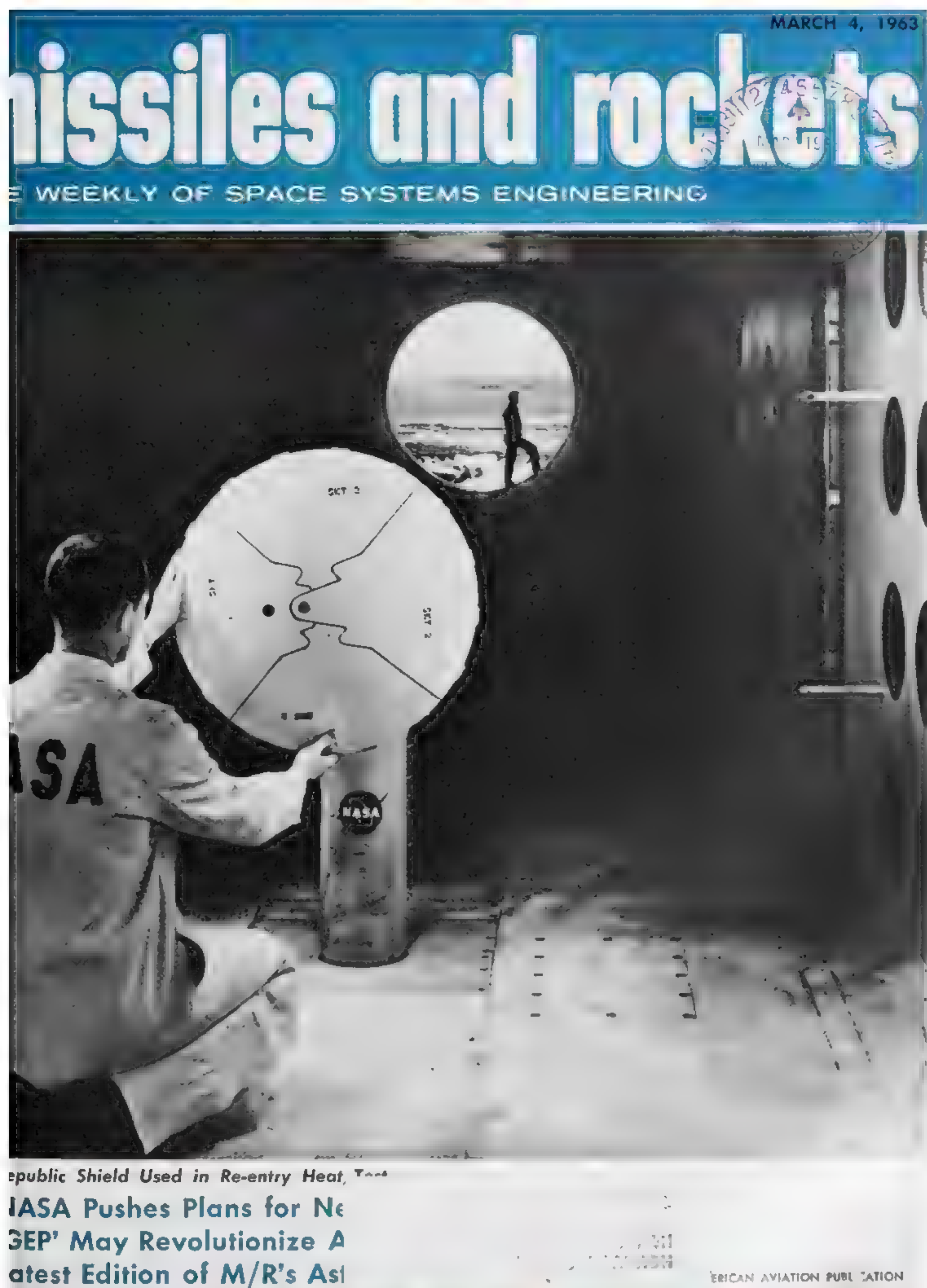
missiles and rockets
THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Radiation Inc. Antenna for Missile Ranges

Air Force Girds to Defend Titan III 12
Exclusive Interview with Dr. von Karman .
JPL's Advanced Liquid Engine Concept . . .

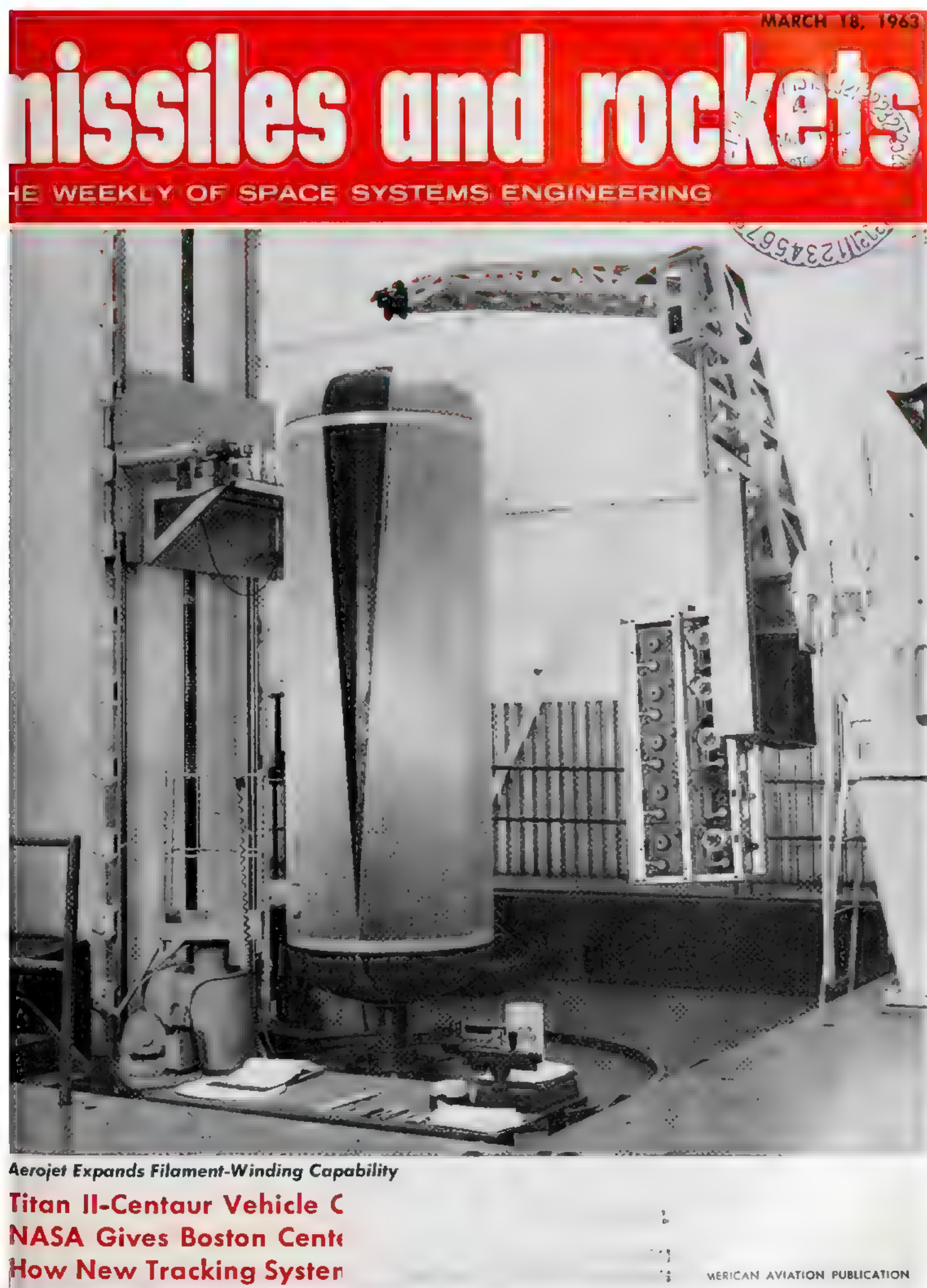
1963_02_25_Missiles_Rockets.jpg



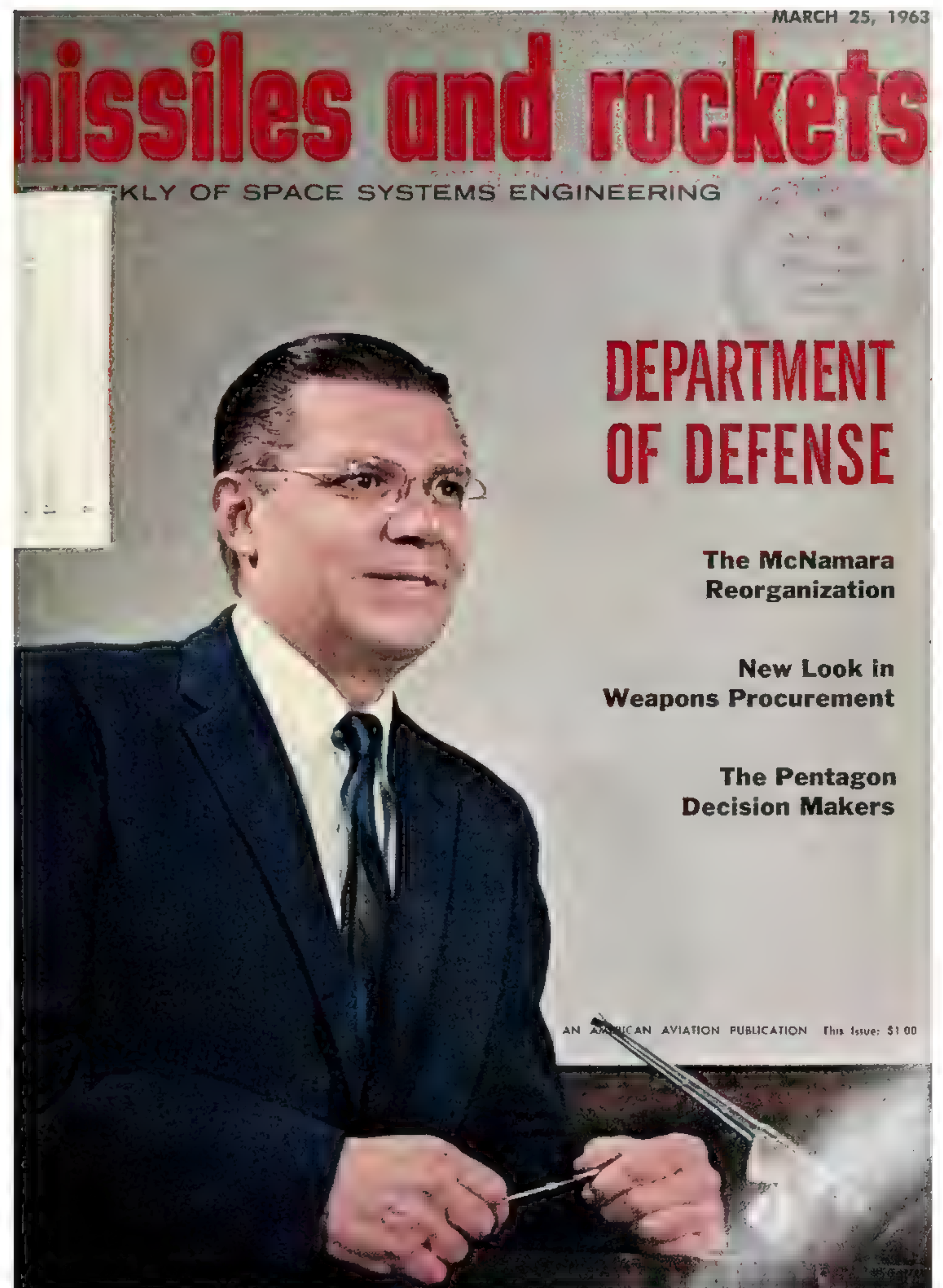
1963_03_04_Missiles_Rockets.jpg



1963_03_11_Missiles_Rockets.jpg



1963_03_18_Missiles_Rockets.jpg



1963_03_25_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



NASA Weighing Tenth Shot In Mercury Program

- DOD Outlines AF Gemini Role
- Report from IEEE Meeting
- Unique Trainer For Gemini

Link's Computer
For Gemini Space Trainer

1963_04_01_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Texaco Test-fires Air Turborocket

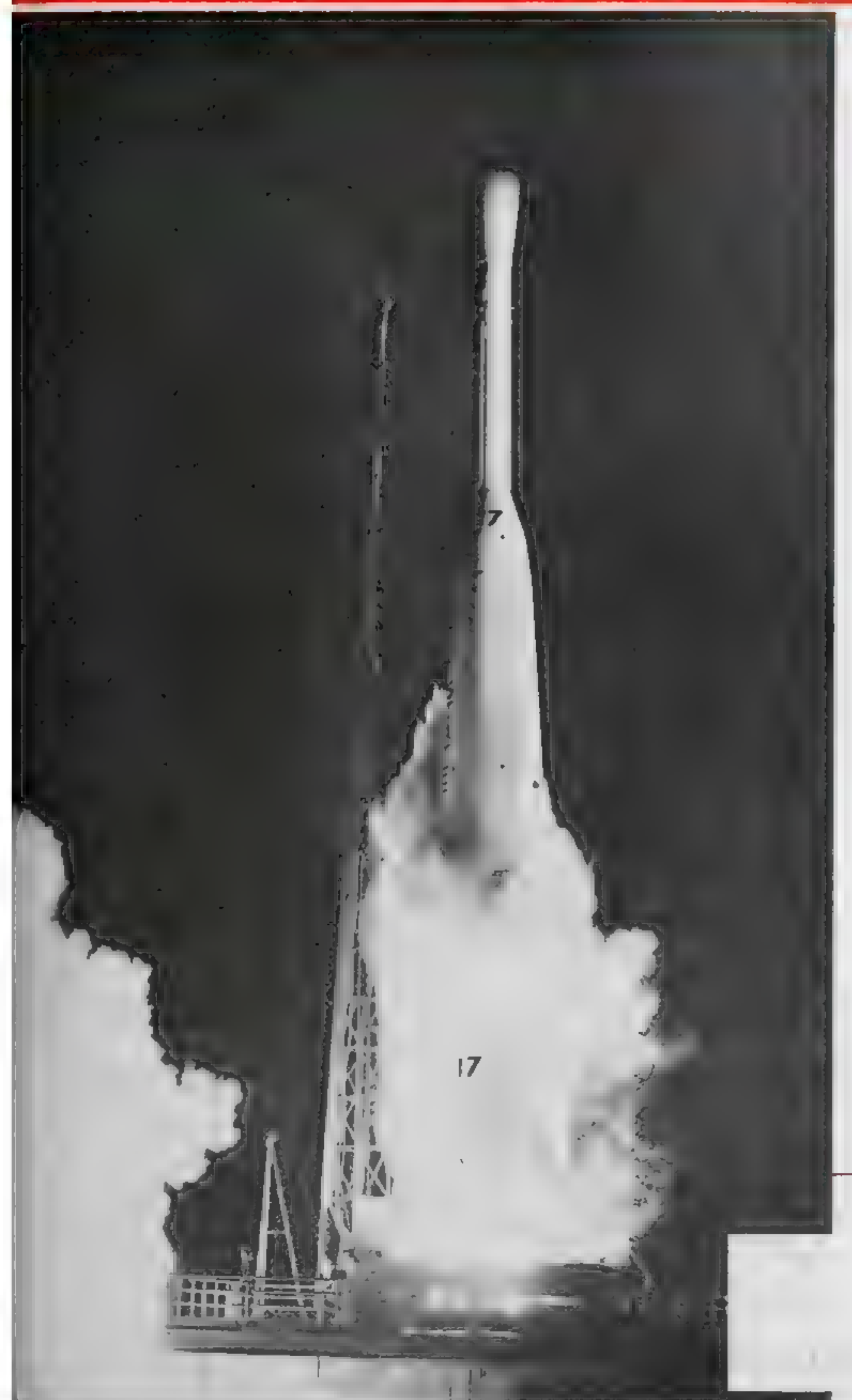
New Concept Challenges Big Boosters . .
Lunik Bolsters NASA Budget Hopes
Radar Work May Aid Moon Explorers . .

PHOTO BY ROBERT
AND ROBERT

1963_04_08_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



ABRES Vehicles To Be Fired At PMR

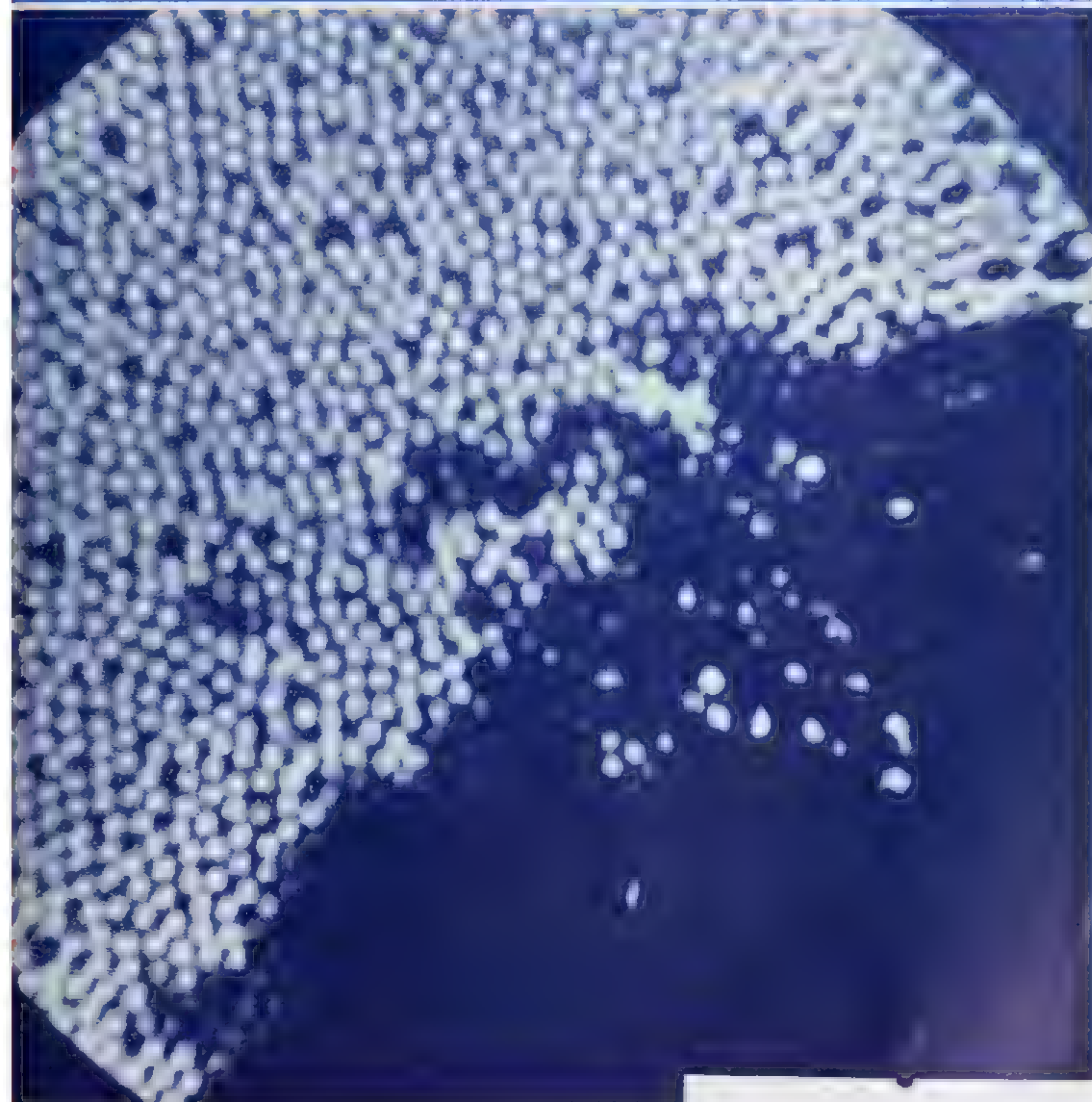
- Details of Polaris Pact
- Goddard Role May Expand
- OAO Control System Tested

Successful S-6 Launch

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missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



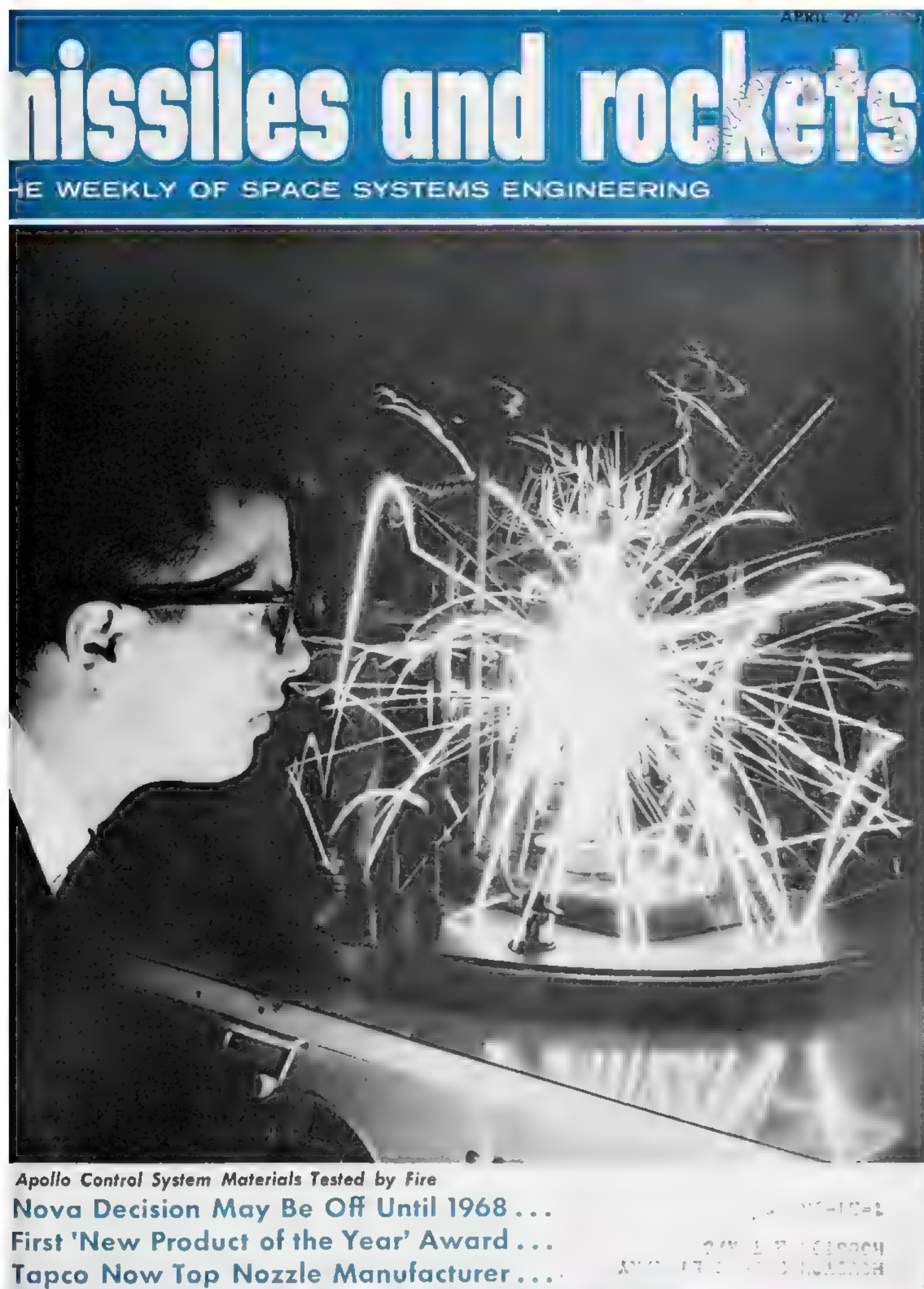
Ion Image of EOS Tungsten Wire Bundle Ionizer

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AND ROBERT

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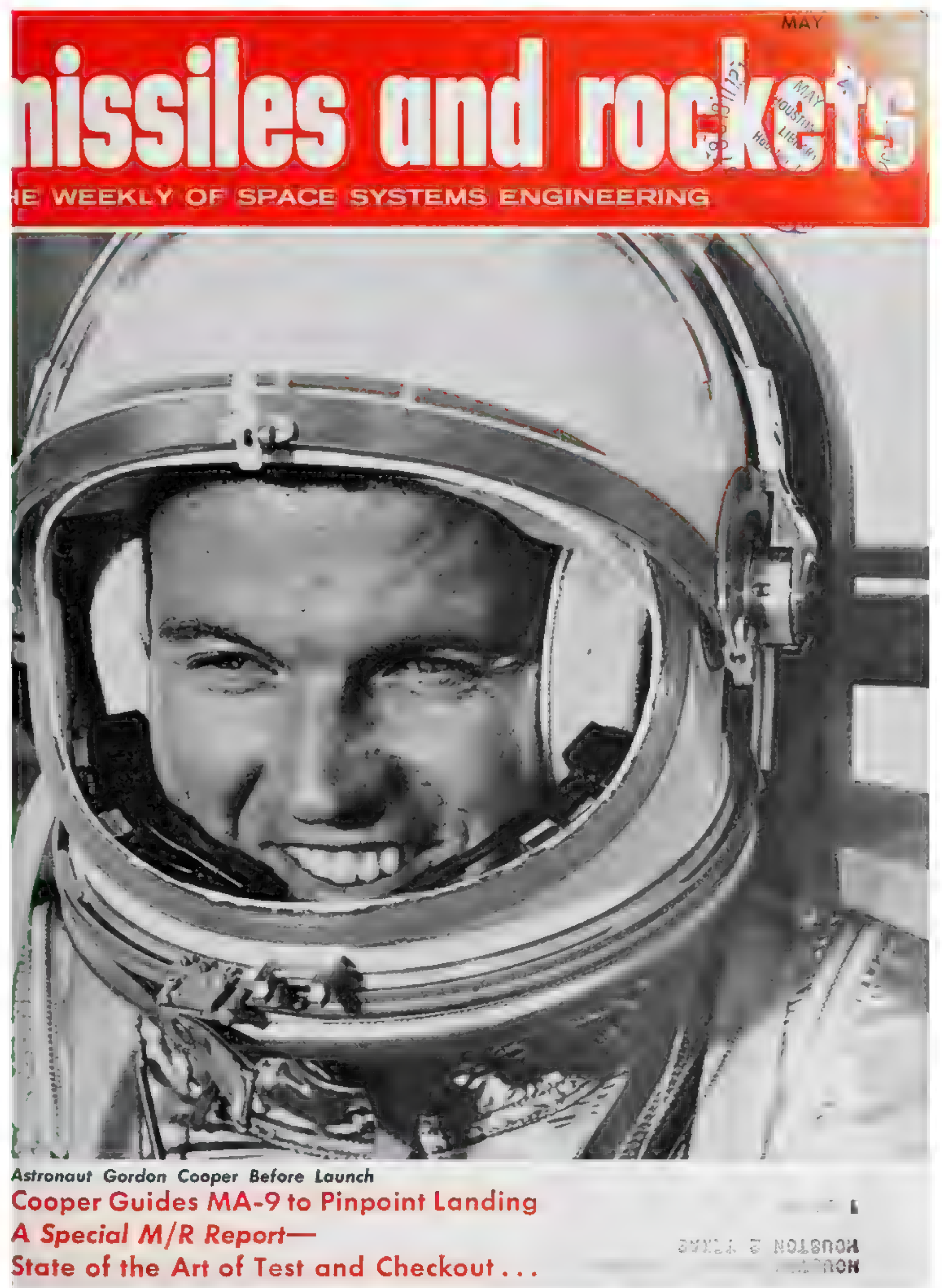
1963_04_29_Missiles_Rockets.jpg



1963_05_06_Missiles_Rockets.jpg



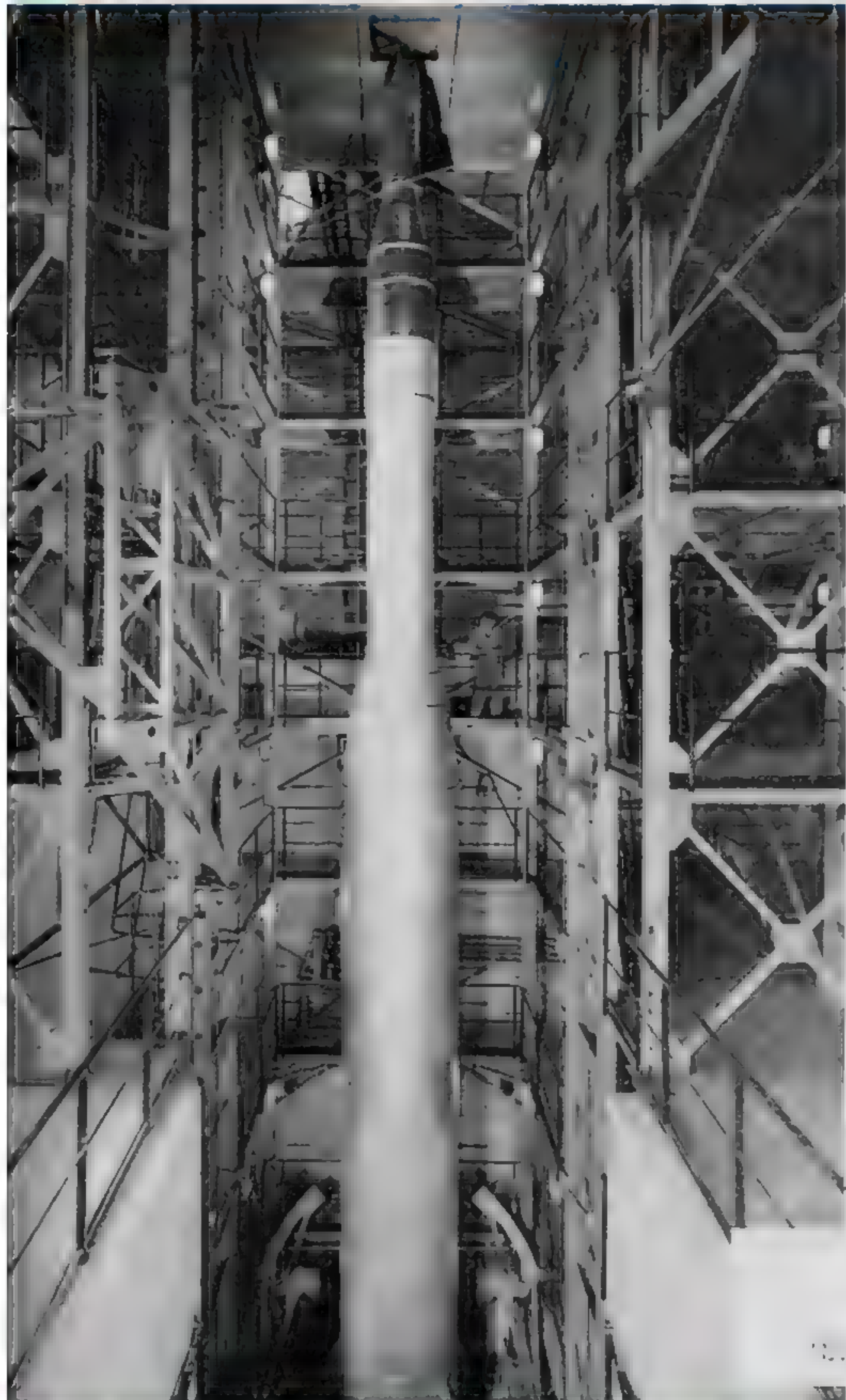
1963_05_13_Missiles_Rockets.jpg



1963_05_20_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Report From 3rd European Spaceflight Symposium

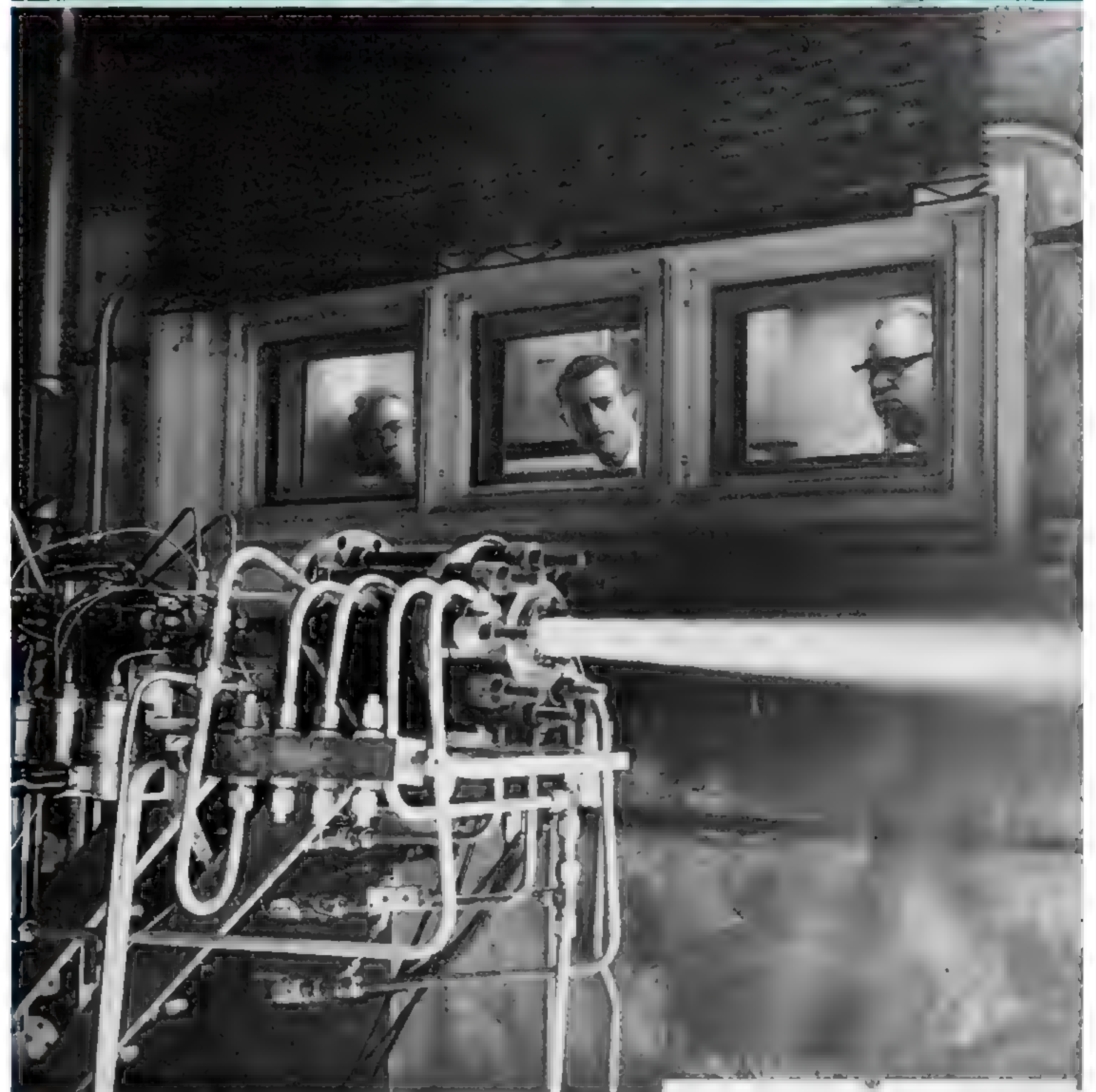
- DOD Says AF May Run MODS
- Decision on MA-10 Pending
- Exclusive—France's Diamant

First Photo of France's Diamant

1963_05_27_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Test-Firing STL's LEM Descent Engine Prototype

Interview with Administrator Webb

DOD Spells Out Contracting Changes ...

STL Wins LEM Descent Engine Award ... '24

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1963_06_03_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Nike-Zeus Intercepts Titan-Boosted Vehicle

Report from Warsaw COSPAR Meeting ...

Study Indicates Space Gap Increasing ...

34,000-mph Re-entry Simulator Planned ... 2

1963_06_10_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Holmes Quitting NASA After Feud over Funding

- End of Road For Mercury
- Paris Air Show: A Special Report
- Launches from B-58 Proposed

Titan II Now Operational

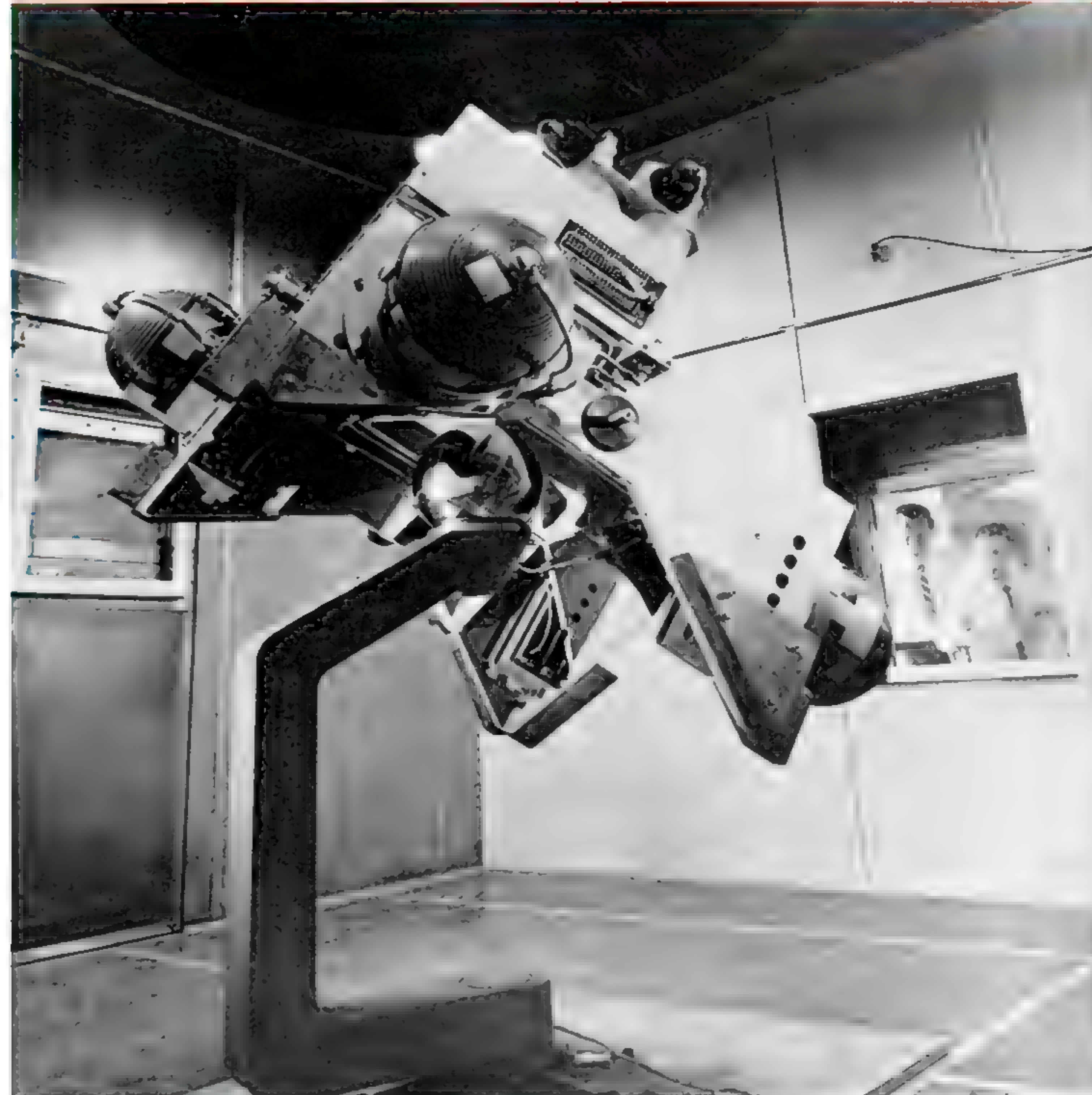
1963_06_17_Missiles_Rockets.jpg



Saturn Stage Goes Aboard 'Pregnant Guppy'
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AF Debates Design of Manned Craft 16
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AN AMERICAN AVIATION PUBLICATION

1963_06_24_Missiles_Rockets.jpg



Westinghouse Air-Supported Satellite Motion Simulator

ASA Budget Cut Nearly Half-Billion . . .
Un-Launched Missile Tests Under Way . .
Test Edition of M/R's Astrolog

1963_07_01_Missiles_Rockets.jpg



AF Recovery Site Plan Finds Foes in Congress

- **Big Solids Funding Trimmed**
- **New Alloy Goes Into Agenda**
- **An IMCC Progress Report**

Inflating Echo II's at Lakehurst

1963_07_08_Missiles_Rockets.jpg



Special Report: LEM Moves Out Of Design Phase

- **MOSS Plans Face Slippage**
- **First Gemini Flight To Orbit**
- **Five Landings Set for Apollo**

Centaur Test at Cape

1963_07_15_Missiles_Rockets.jpg

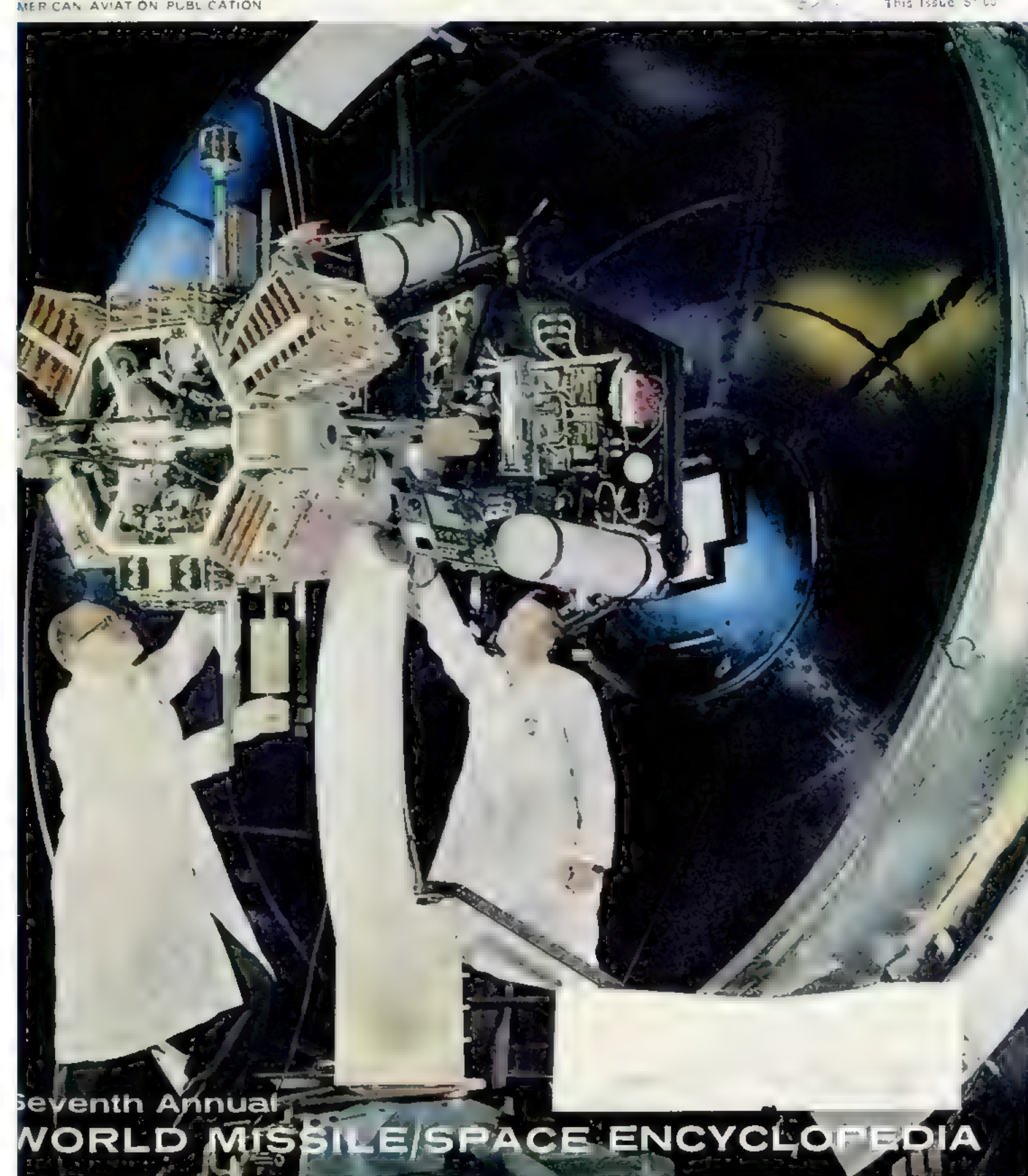


Special
Report—
How to Do
Business
In Europe

- Flux in Space Management
- Syncom II Launch Prepared
- Gemini's Command Plan

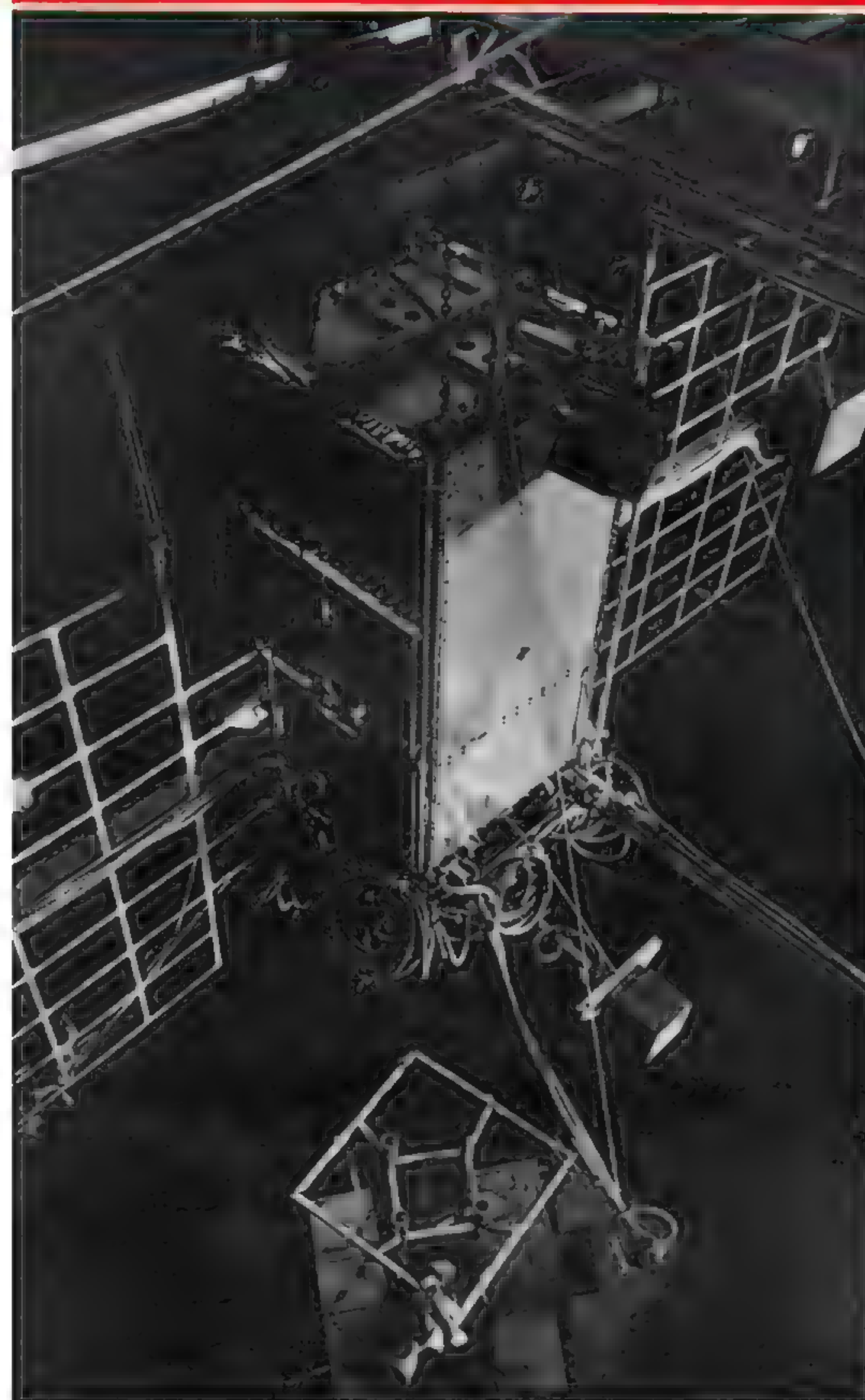
Antennas on ARIS Ship

1963_07_22_Missiles_Rockets.jpg



Seventh Annual
WORLD MISSILE/SPACE ENCYCLOPEDIA

1963_07_29_Missiles_Rockets.jpg



Congress
May Create
Military Arm
For NASA

Laser Test
Set for S-66

Germans Plan
First Satellite

New Apollo
Optics Proposed

OGO in STL Chamber

AN AMERICAN AVIATION
PUBLICATION

1963_08_05_Missiles_Rockets.jpg



Special
Report on
Filament
Winding

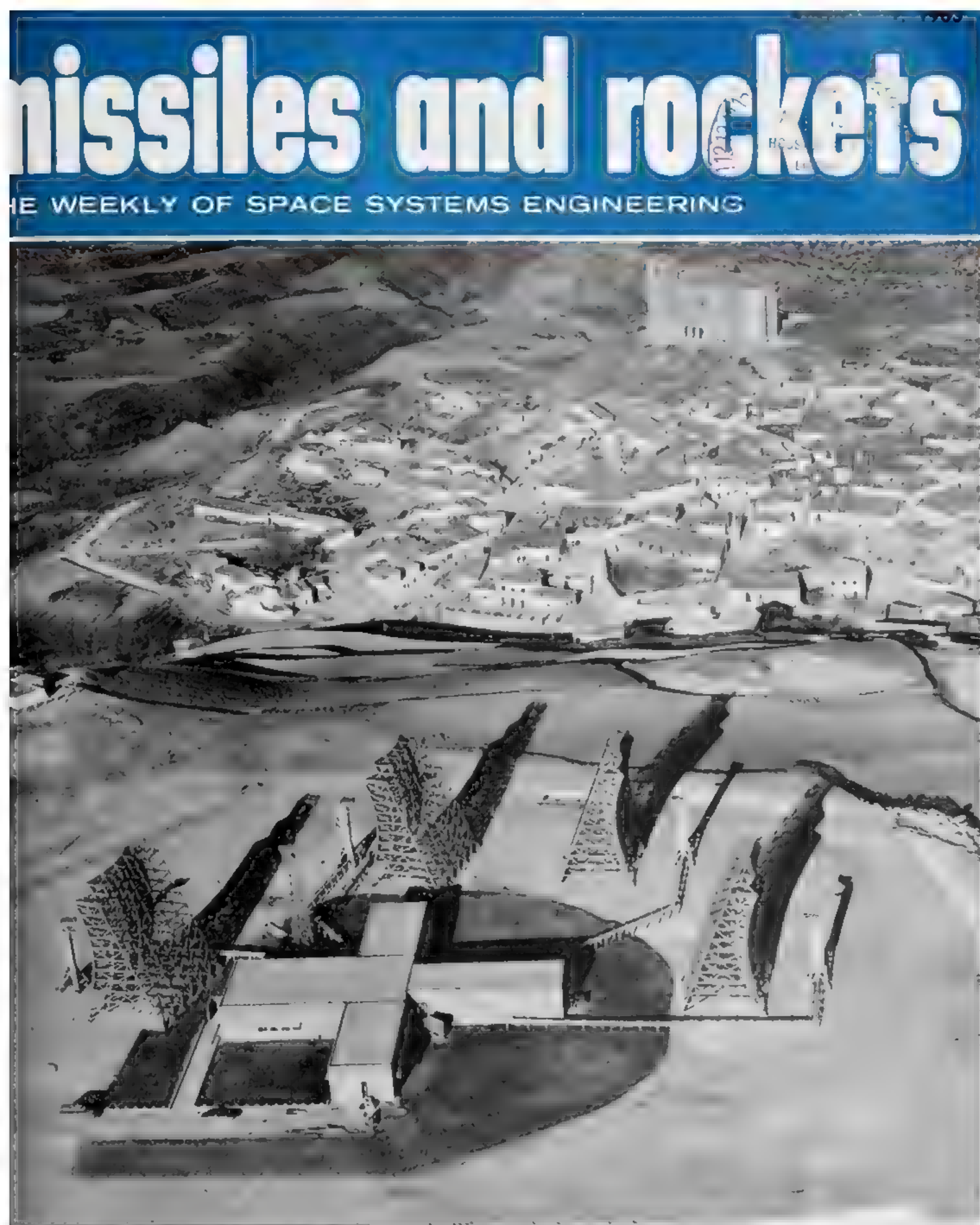
Air Force Will
Take Over PMR

NASA Funds at
\$5.36 Billion

Bell Change:
LLRV Design

Centaur 'Moon Shift'

1963_08_12_Missiles_Rockets.jpg



Air Force Troposcatter Array in Spain
U.S. Presses Vela Hotel Development
Dyna-Soar Project Picks Up Momentum
Westinghouse Outlines Gemini Radar

AN AMERICAN AVIATION PUBLICATION

1963_08_19_Missiles_Rockets.jpg



Pentagon
Decides
To Continue
Big Solids

Signs of Hope
For MMRBM

GE Picked to
Develop BIOS

Karth Urges
Sales of Atlas

P&W's RL-10 Engine

1963_08_26_Missiles_Rockets.jpg



NASA Eyes
H₂/Fluorine
Booster
Stage

Space Structure
Needs for '70's

Titan II Silo
Repair Time Cut

Latest Edition
Of M/R Astrolog

Saturn S-IC Thrust Structure

1963_09_02_Missiles_Rockets.jpg



AMF Photo Tracker at Pacific Range

1963_09_09_Missiles_Rockets.jpg



Details of
Soviet ABM
Revealed

U. S. Will Build
Space Stations

NASA Eyes New
Oxygen System

DOD Contractor
Rating Outlined

Wallops Scout Launch

1963_09_16_Missiles_Rockets.jpg



Soviet Shows
Interest in
Joint Lunar
Landing

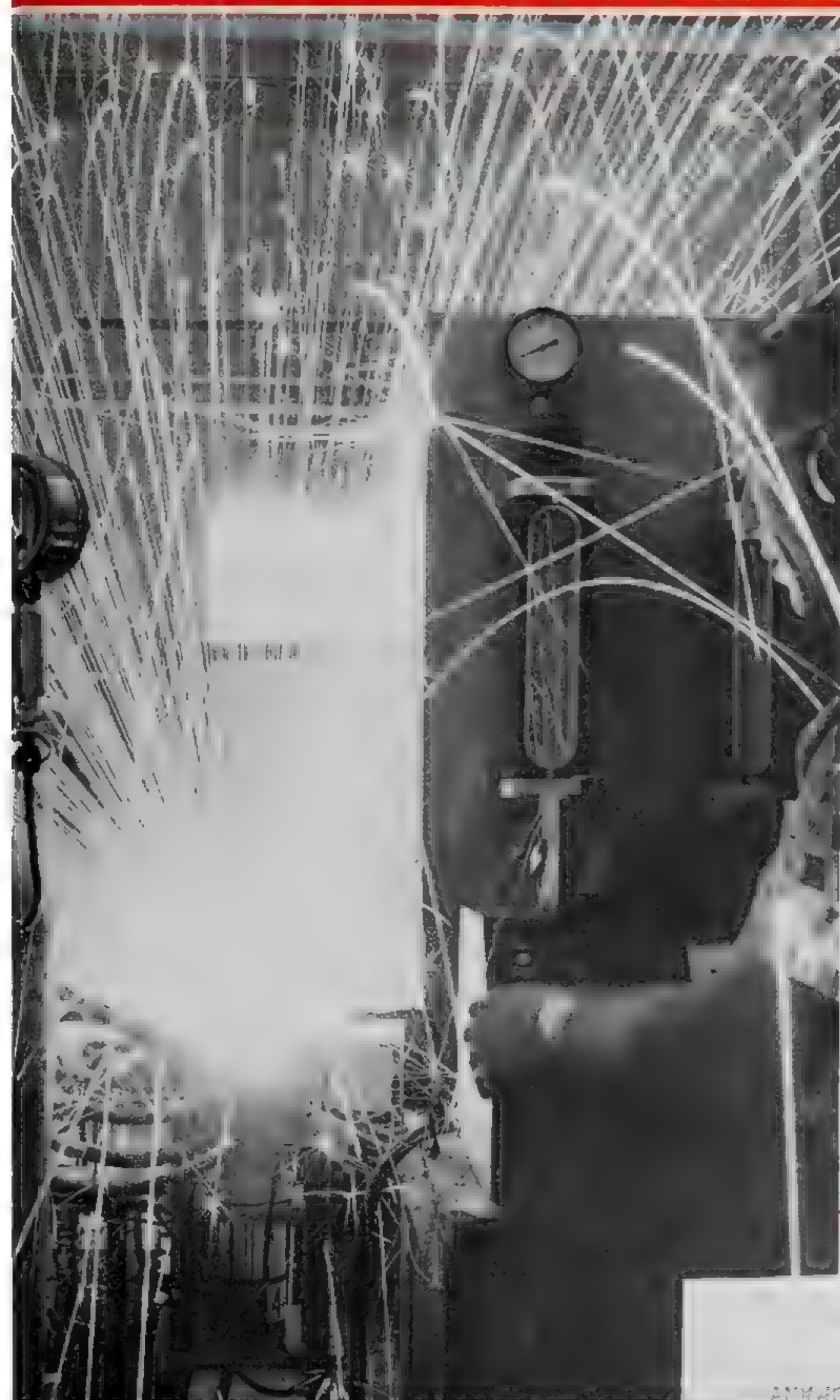
Senate Debate on
ABM Intensifies

Report on 1st
ASSET Flight

Linde Pushing
Cryogenics

First ASSET Before Launch

1963_09_23_Missiles_Rockets.jpg



Scientists
Call for
Release of
EMP Data

Effects of
JFK's Proposal

Theodolite for
Saturn Guidance

Progress at
Mississippi Site

CAL Tests Re-entry Materials

1963_09_30_Missiles_Rockets.jpg



Honeywell's Airborne Electrostatic Gyro

A SPECIAL M/R REPORT—

Advanced Guidance and Control System
For Missiles and Spacecraft

AN AMERICAN AVIATION PUBLICATION

1963_10_07_Missiles_Rockets.jpg

OCTOBER 14, 1963

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



First Gemini Arrives at Canaveral

NASA Reorganizes to Speed Decisions .
Doppler Study Promising for Navigation
IEEE's Space Electronics Symposium . . .

1963_10_14_Missiles_Rockets.jpg

OCTOBER 21, 1963

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



First Photo of ASTOR Production Line

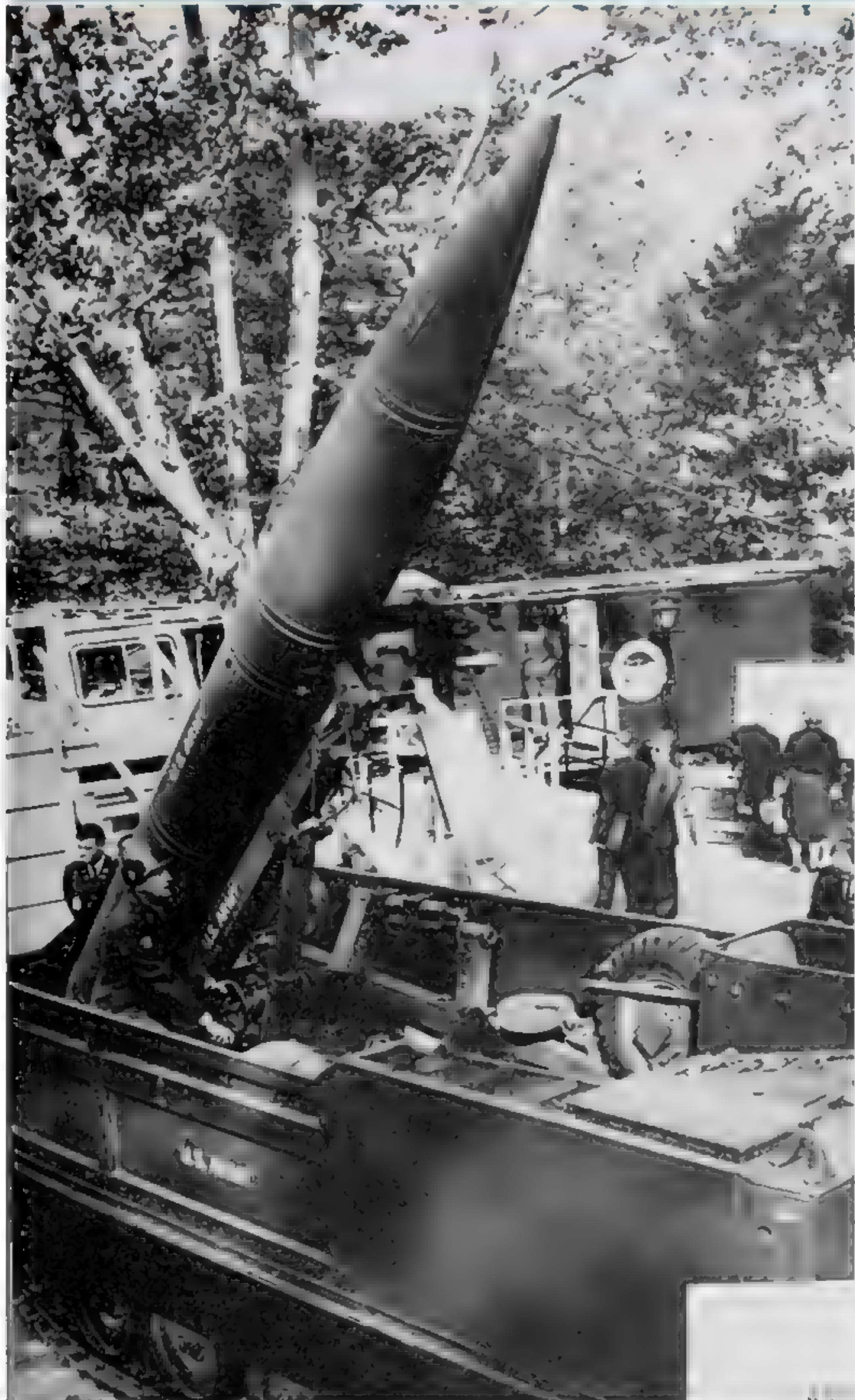
FK Order To Tighten Patent Policy . . .
Larger Pilot Role in X-20 Promising . .
Marshall Labs' 'Enertron' Generator .

1963_10_21_Missiles_Rockets.jpg

OCTOBER 28, 1963

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Missiles and
Space Now
Becoming
Biggest U.S.
Employer

Fresh Details
On Army's Lance

Cork Finding
Space Uses

X-20 Tracking
Antennas Ready

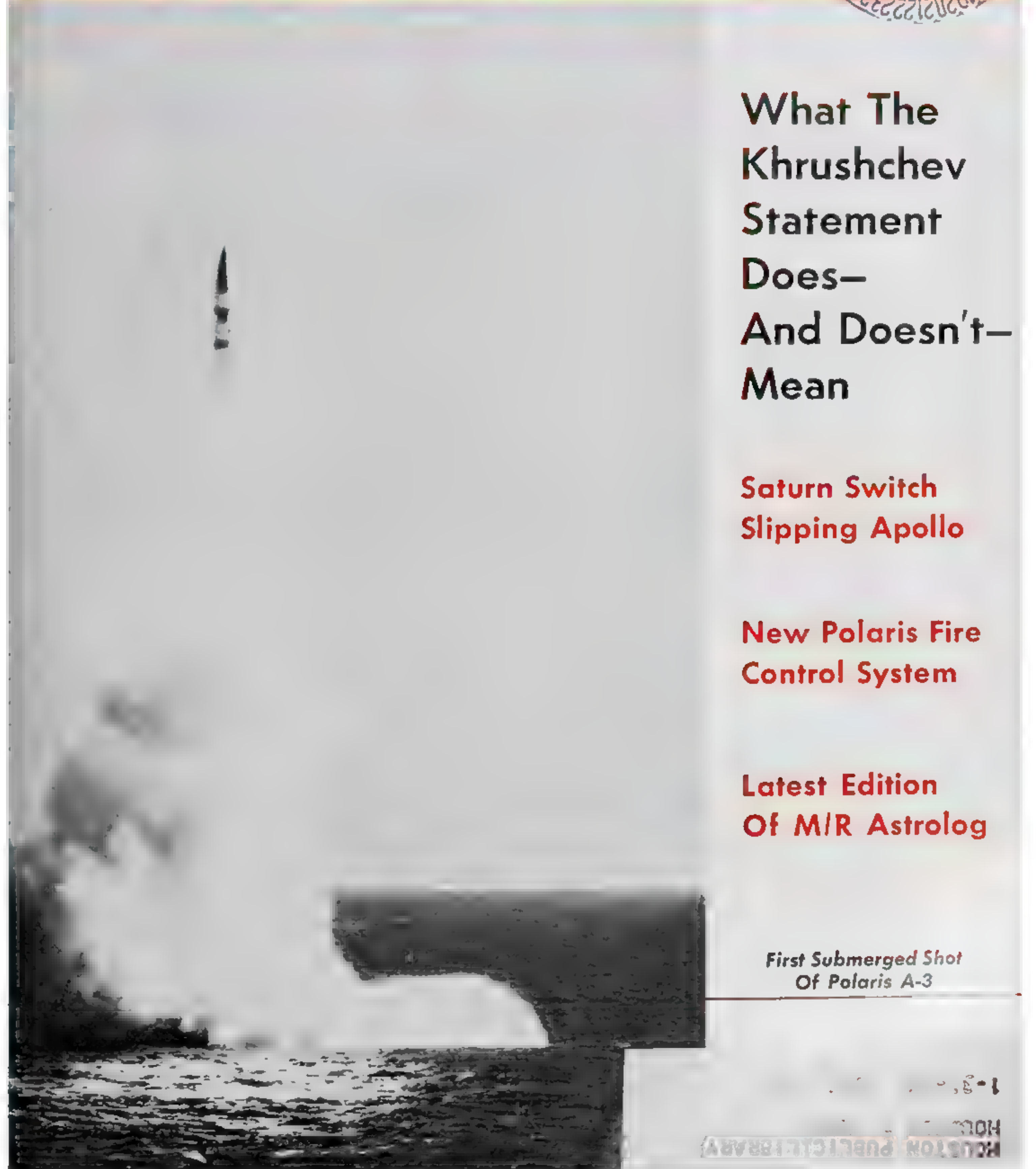
First Lance Mockup Display

1963_10_28_Missiles_Rockets.jpg

NOVEMBER 4, 1963

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



What The
Khrushchev
Statement
Does—
And Doesn't—
Mean

Saturn Switch
Slipping Apollo

New Polaris Fire
Control System

Latest Edition
Of M/R Astrolog

First Submerged Shot
Of Polaris A-3

1963_11_04_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**NASA
Planning
To 'FLOX'
Atlas**

**AF May Drop
Blue Scout**

**Moon Race Still
On—Khrushchev**

**Picture Report
On Arecibo**

**ADDPEP Assembled
For First Launch**

1963_11_11_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**Senate
Committee
Votes NASA
\$5.19
Billion**

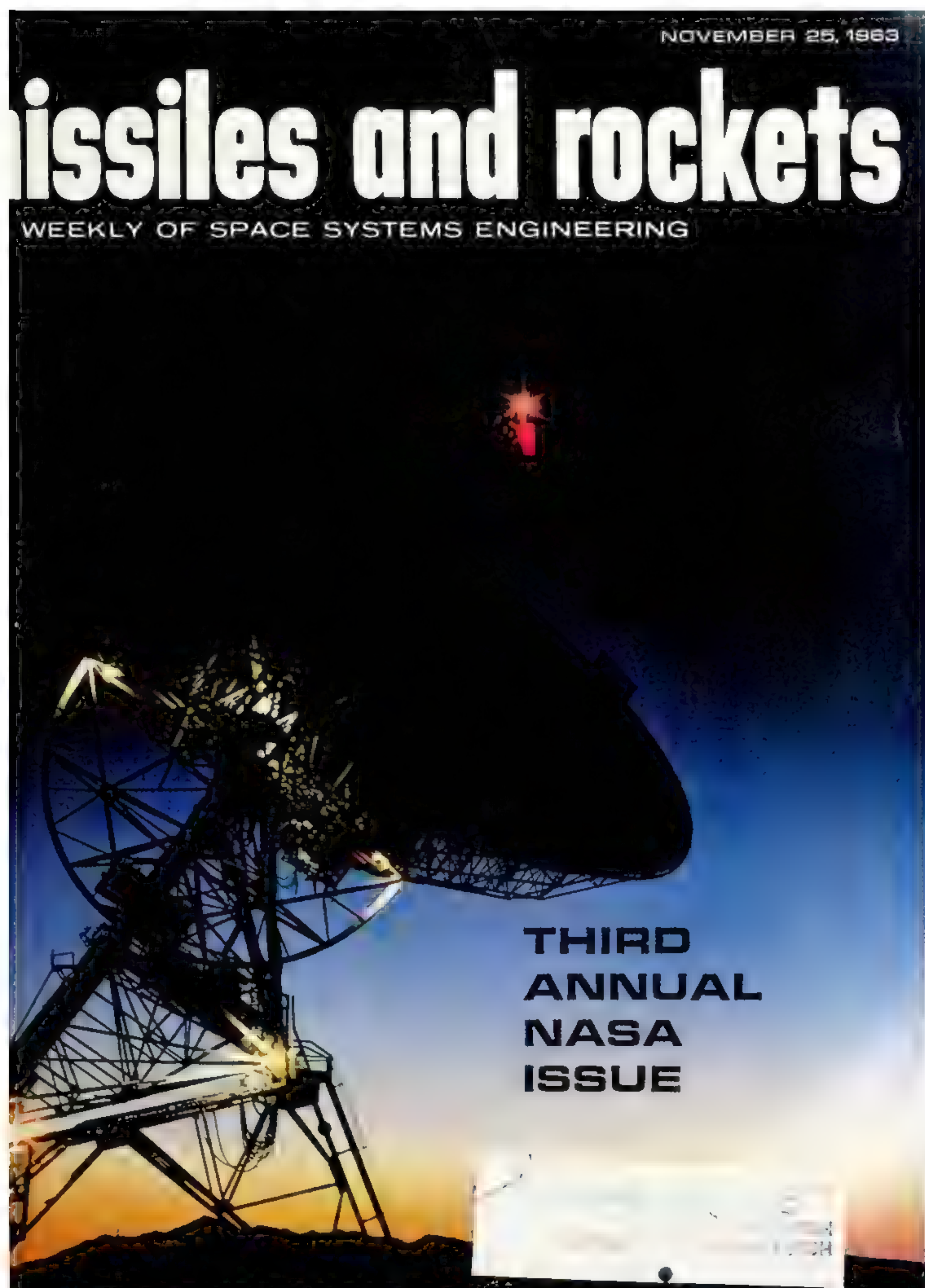
**Thiokol Booster
Plant Rises**

**NASA Laser
Work Doubling**

**GE Simulates
Orbiting Lab**

**First Abort Shot
Of Apollo**

1963_11_18_Missiles_Rockets.jpg

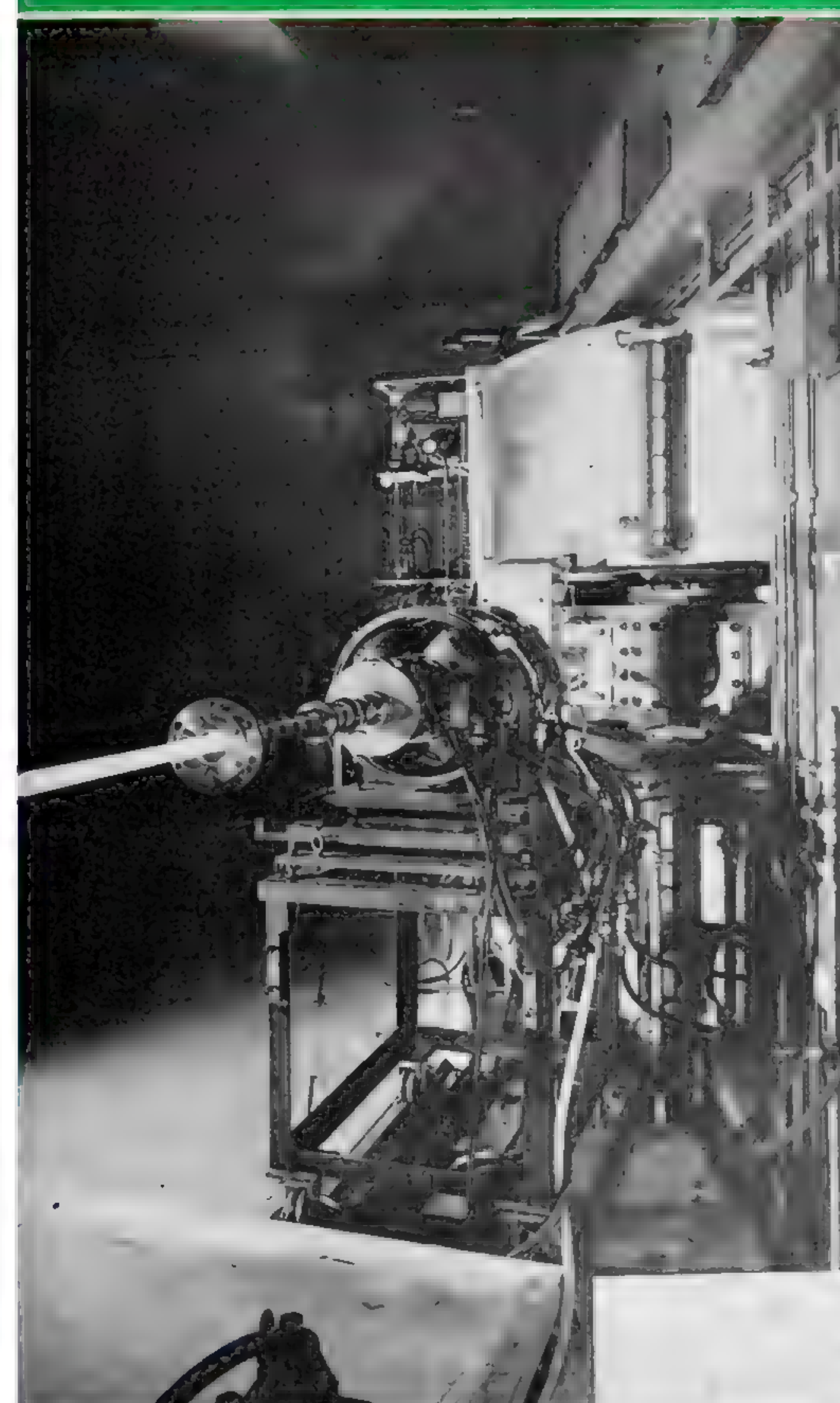


**THIRD
ANNUAL
NASA
ISSUE**

1963_11_25_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**Johnson
Will Press
U.S. Space
Program**

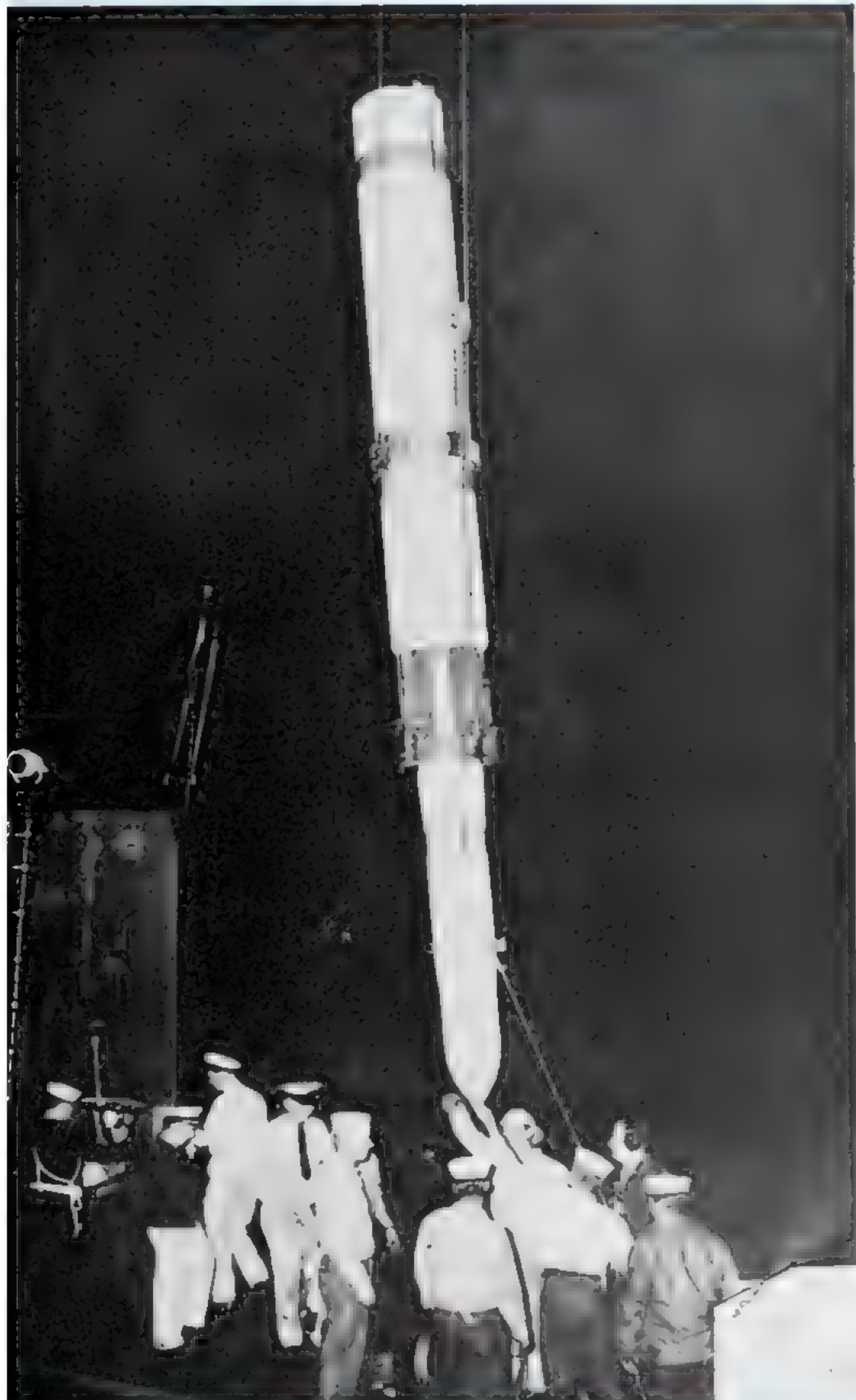
**Military Space
Role May Grow**

**Part II: Profile
Of an Industry**

**Aerojet's New
Florida Plant**

Lewis Center Cyclotron

1963_12_02_Missiles_Rockets.jpg



**Subroc
Nearing
Operational
Tests**

**Centaur Shot
Rated Success**

**Scorpio Engine
Heads RPL Jobs**

**Pure-Fluid
Guidance Gains**

*Subroc Loaded on
Sub for Firing*

1963_12_09_Missiles_Rockets.jpg



2 Engine on Rocketdyne Production Line

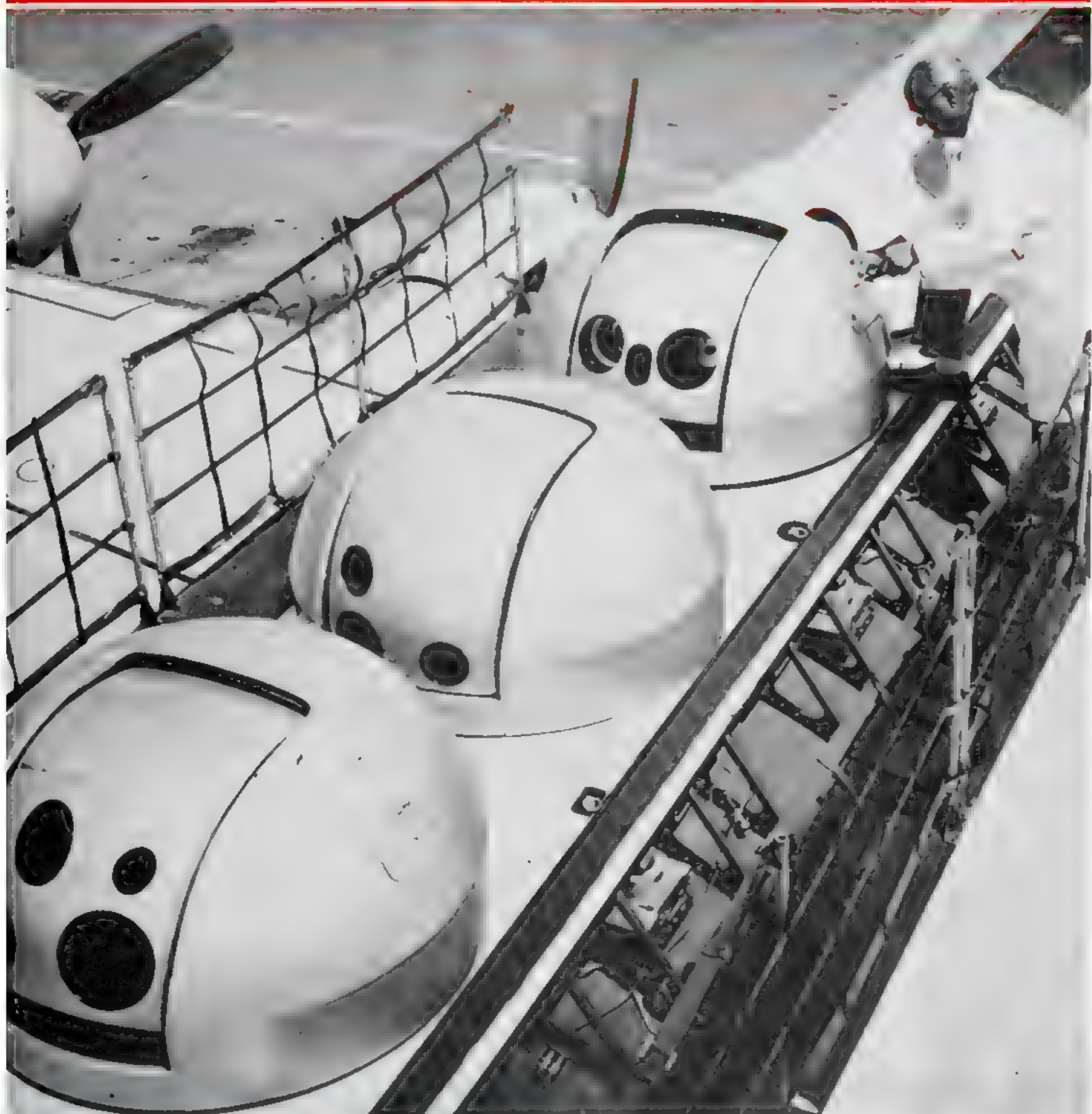
AF GETS MOL, LOSES DYNA-SOAR—

Industry Awaits Action on Proposals..

Congress Gives Tentative Support....

X-20 Loss Stirs New Interest in X-15..

1963_12_16_Missiles_Rockets.jpg



Bendix TRAP III System to Measure Re-entry Radiation

DOD Pushing Own ComSat Program...

NASA Fights to Meet '70 Moon Date...

New Re-entry Shielding for ASSET.....

1963_12_23_Missiles_Rockets.jpg



missiles and rockets

MAGAZINE OF WORLD ASTRONAUTICS

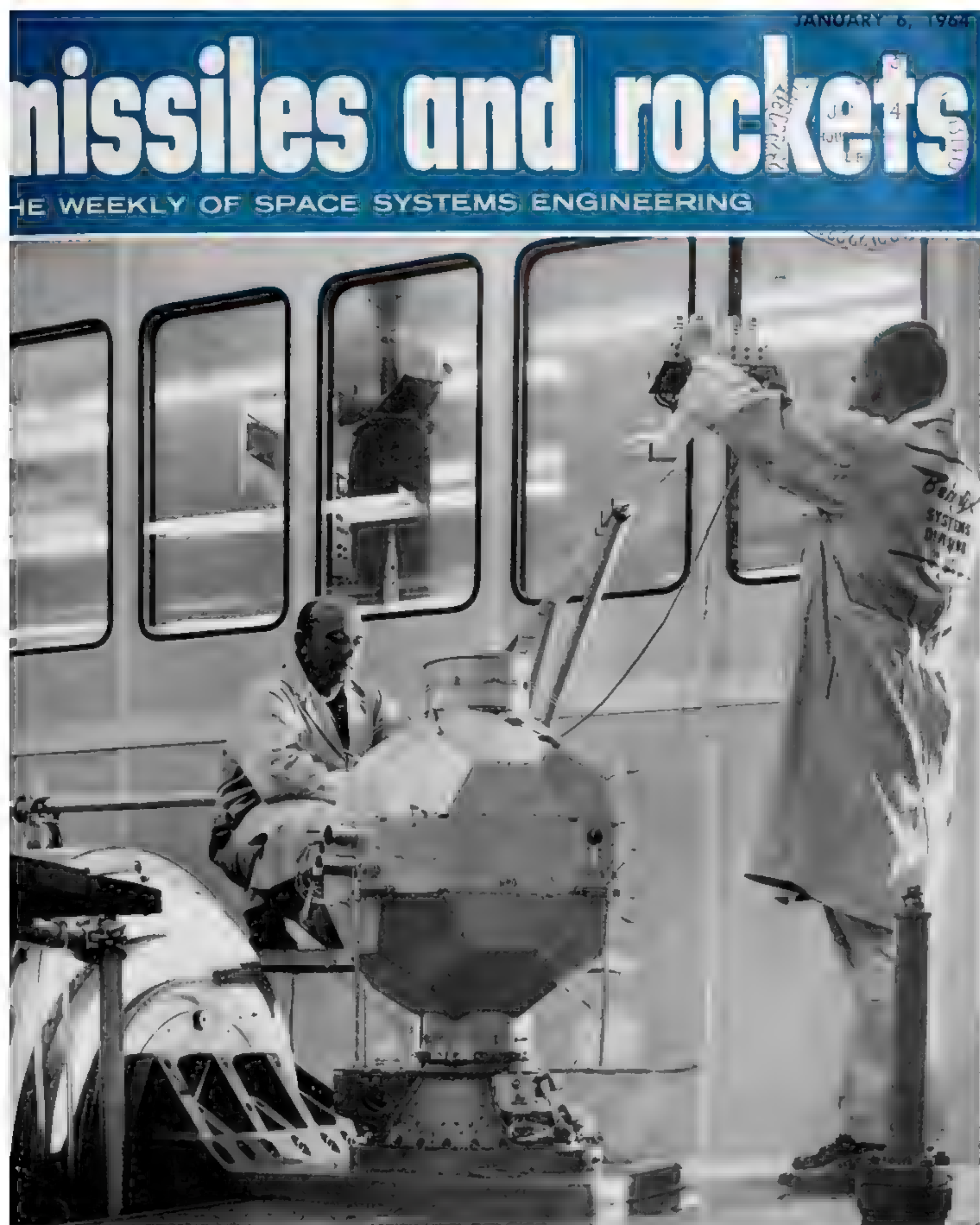


Missiles and Rockets - Magazine of World Astronautics
Published by American Publications, Inc.
Washington D.C.

1964

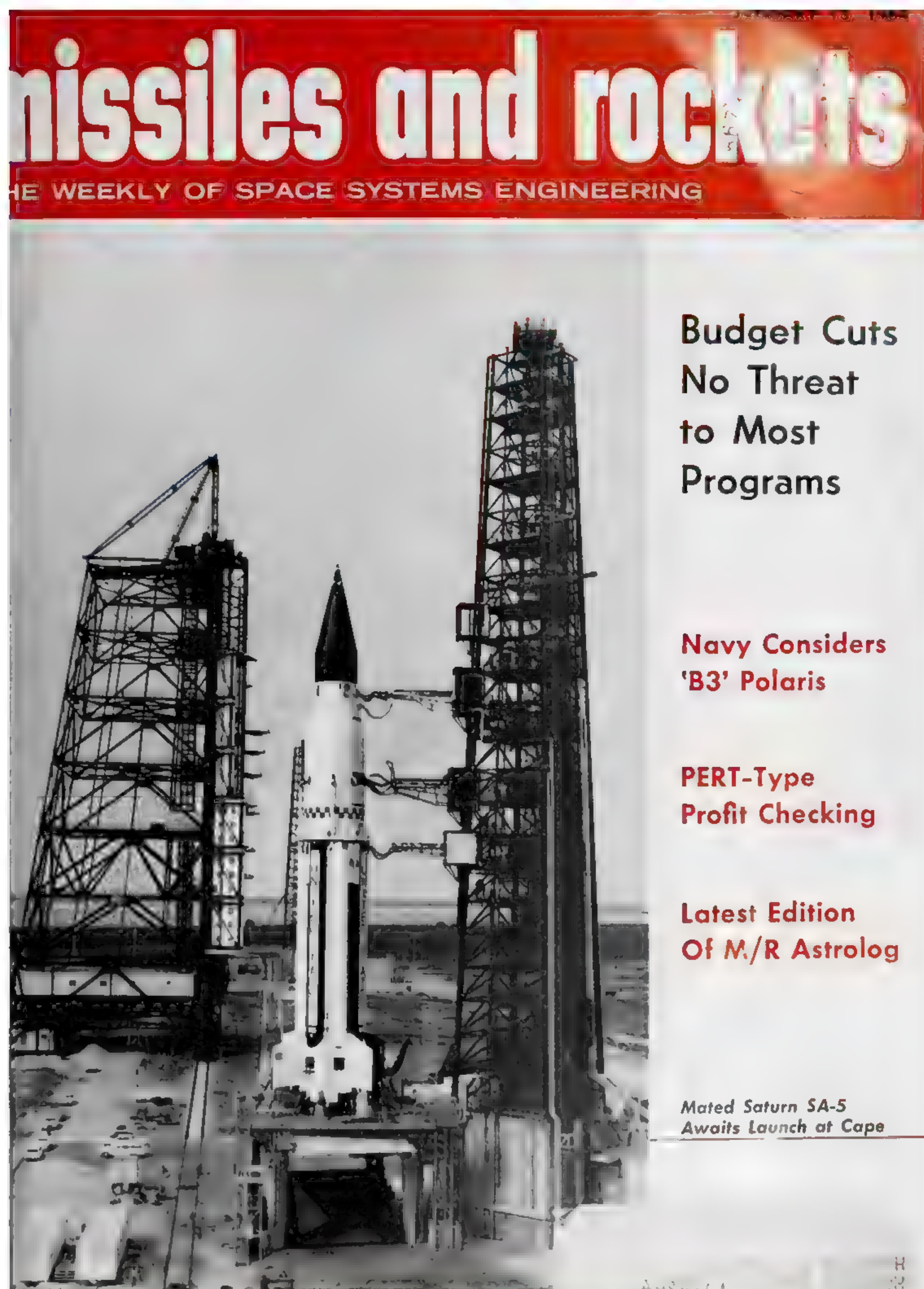
Volume 14, No. 1-26 (January 6, 1964 to June 29, 1964)

Volume 15, No. 1-25 (July 6, 1964 to December 21, 1964)
(*Dec. 28, 1964 was not issued)



Bendix Tests Prototype of Injun Explorer
 NASA To Ask \$5.4 Billion for FY '65 12
 RIFT Victim of Rover Economy Move 1
 'Off-Shelf' Injun IV Nearing Launch 1

1964_01_06_Missiles_Rockets.jpg



Budget Cuts
 No Threat
 to Most
 Programs

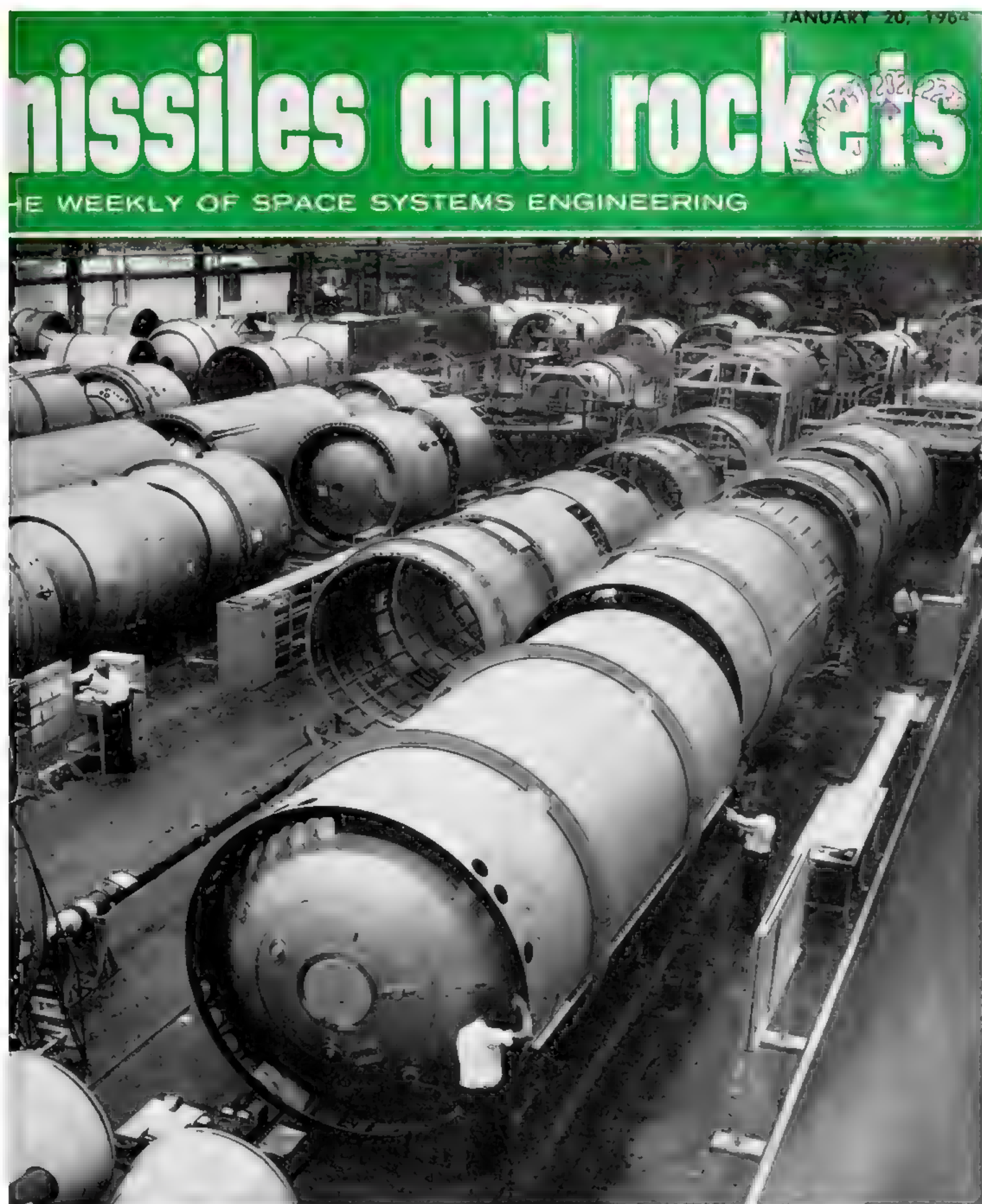
Navy Considers
 'B3' Polaris

PERT-Type
 Profit Checking

Latest Edition
 Of M/R Astrolog

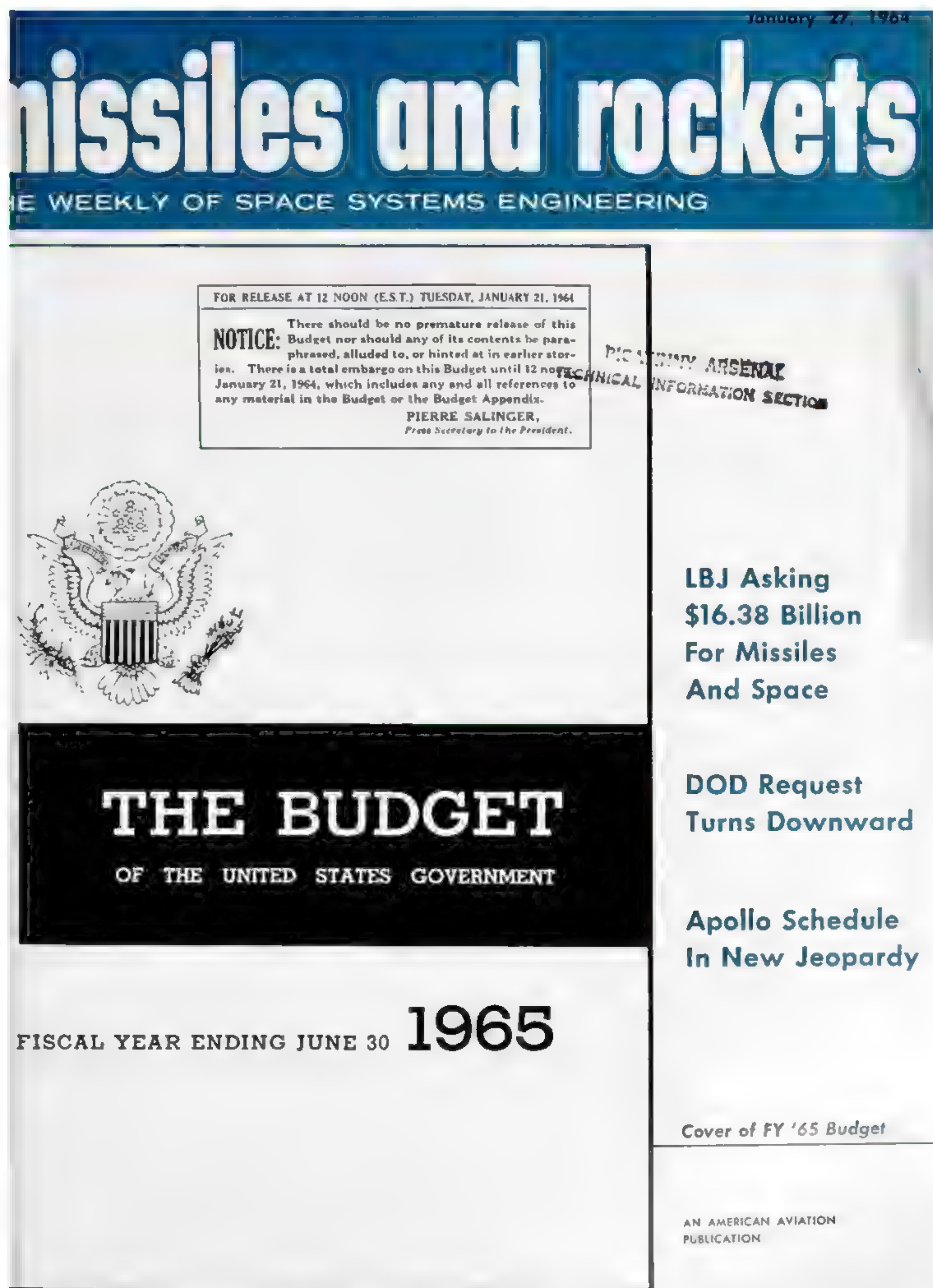
Mated Saturn SA-5
 Awaits Launch at Cape

1964_01_13_Missiles_Rockets.jpg



First Titan III Static Test Tanks
 \$5.445 Billion Seen Vital for Apollo . . .
 DOD Asks \$17.2 Billion Authorization . .
 Recording System Aids A-ICBM Design .

1964_01_20_Missiles_Rockets.jpg



FOR RELEASE AT 12 NOON (E.S.T.) TUESDAY, JANUARY 21, 1964
NOTICE: There should be no premature release of this Budget nor should any of its contents be paraphrased, alluded to, or hinted at in earlier stories. There is a total embargo on this Budget until 12 noon, January 21, 1964, which includes any and all references to any material in the Budget or the Budget Appendix.
 PIERRE SALINGER,
 Press Secretary to the President.

DEPARTMENT OF DEFENSE
 TECHNICAL INFORMATION SECTION

LBJ Asking
 \$16.38 Billion
 For Missiles
 And Space

DOD Request
 Turns Downward

Apollo Schedule
 In New Jeopardy

FISCAL YEAR ENDING JUNE 30 **1965**

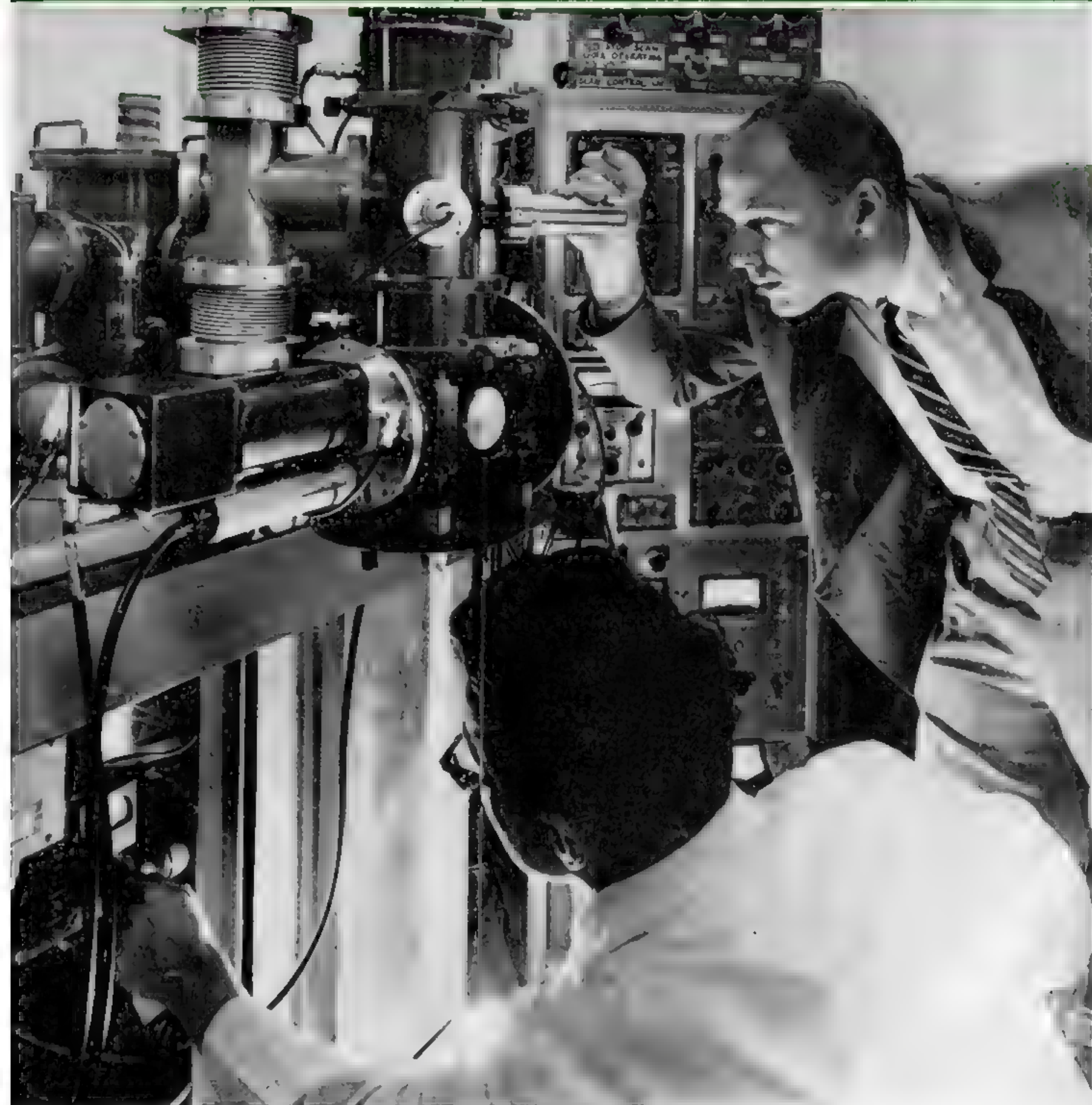
Cover of FY '65 Budget

AN AMERICAN AVIATION
 PUBLICATION

1964_01_27_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Westinghouse's Scanning Electron Microscope

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SPECIAL REPORT ON MICROELECTRONICS—
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 AN AMERICAN AVIATION PUBLICATION

1964_02_03_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Navy's
Tactical
Probe Hopes
Delayed

Plans for Apollo
Follow-ons Told

Nuclear Engine
Fight Looms

New Guidance
Platform on SA-5

Ranger VI's
Good Beginning

1964_02_10_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



First Step
Taken in
Definition
Of MOL

New Threat to
MMRBM Funding

Boston Center
Plan To Be Probed

EDITAR Tracking
Highly Accurate

Korad's 500 Megawatt
Pulsed Laser

1964_02_17_Missiles_Rockets.jpg

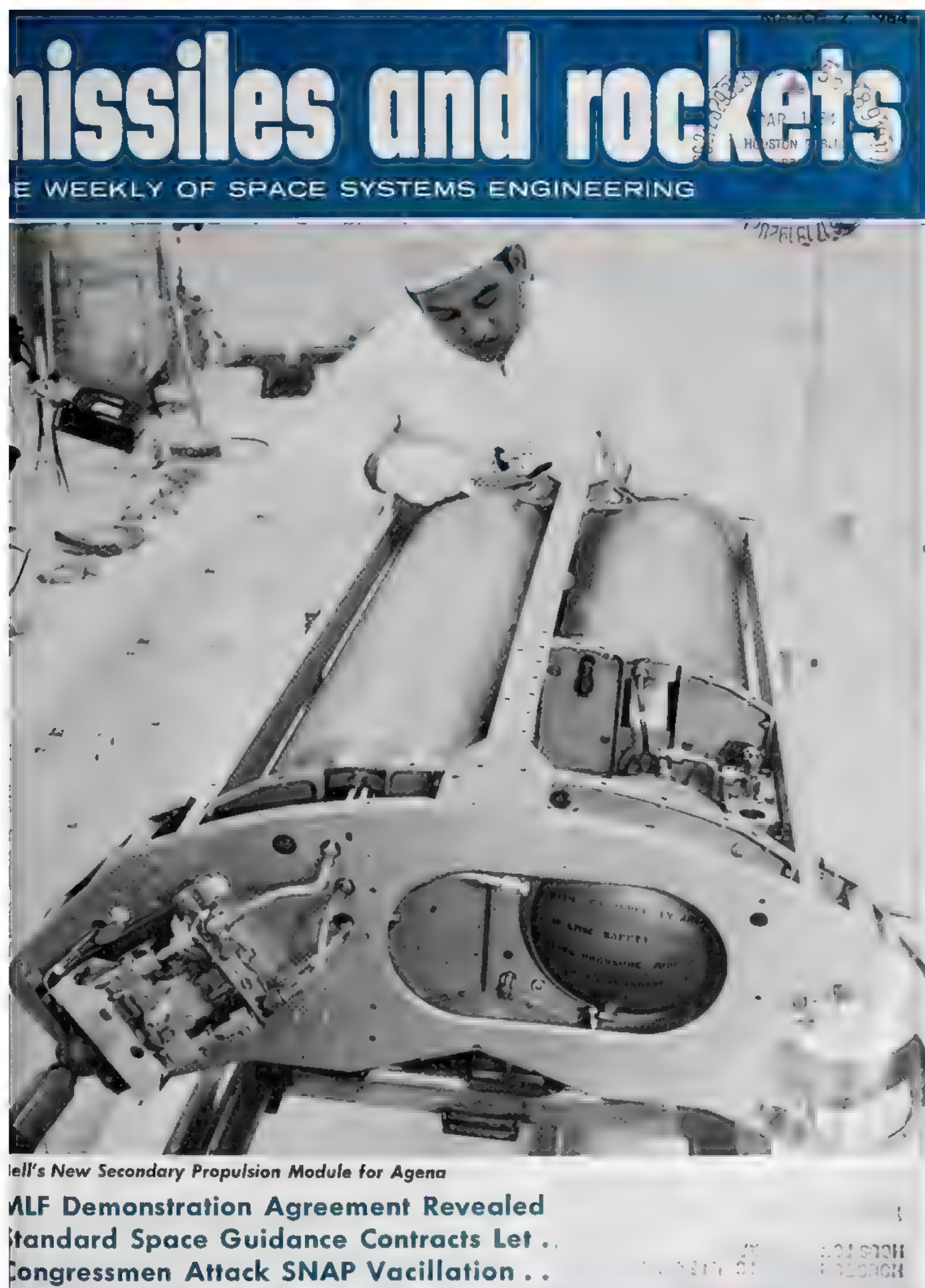
missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



First Photo of Full-Scale TOW Mockup
 Brown Reveals MOL Growth Potential
 Apollo Flight Display Unit Tested . . .
 A Last Interview with Dr. Saenger . . .

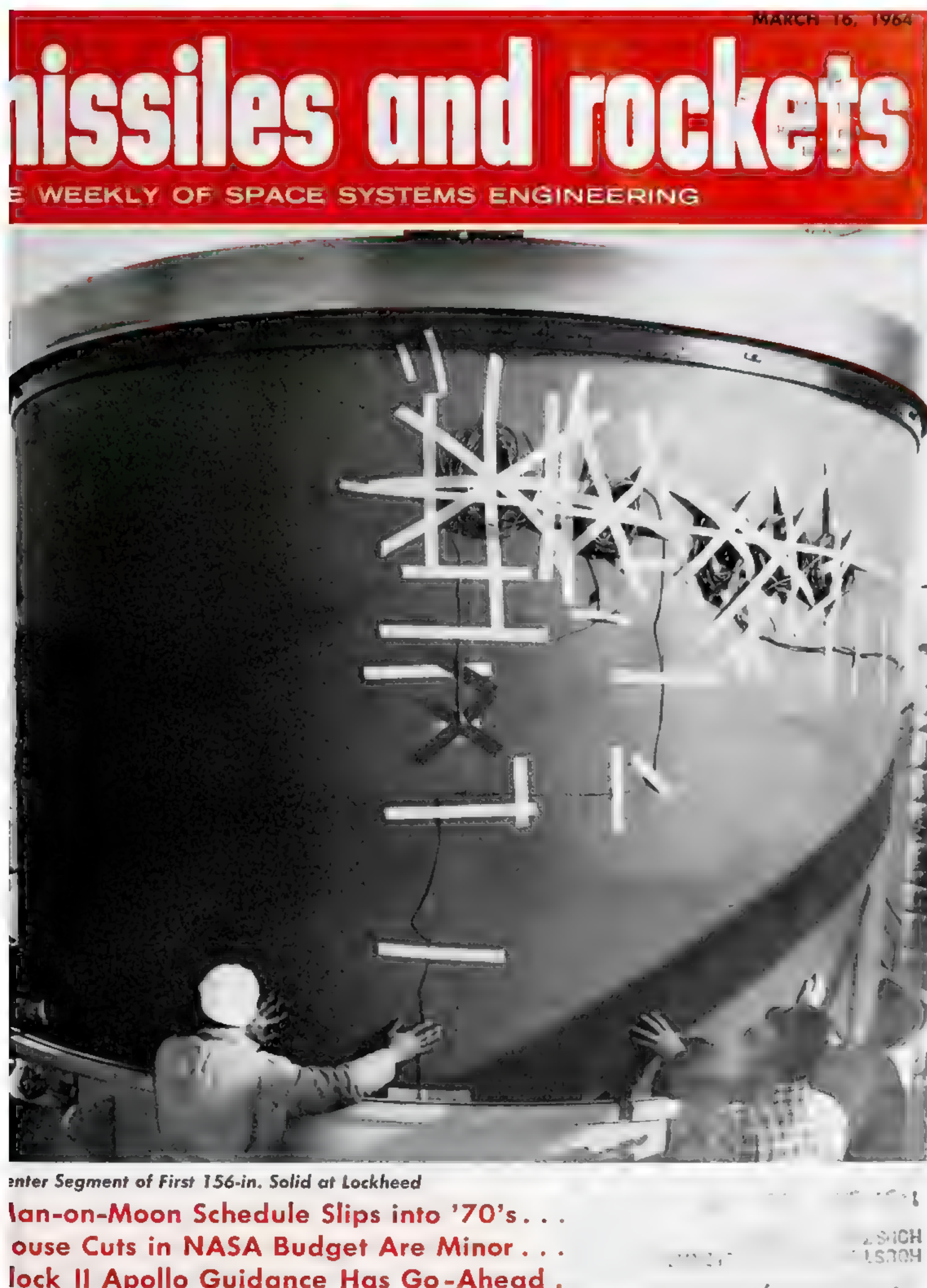
1964_02_24_Missiles_Rockets.jpg



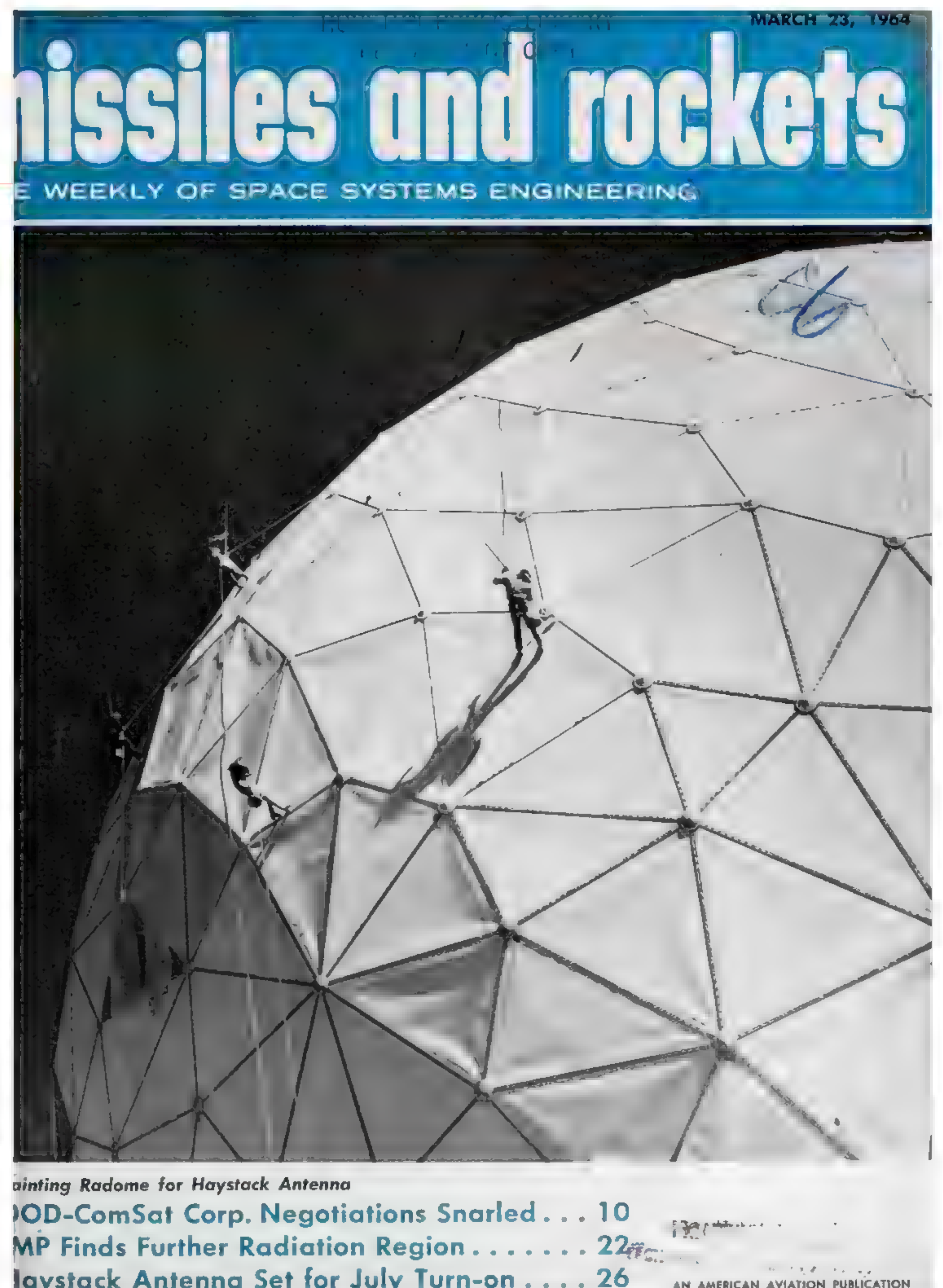
1964_03_02_Missiles_Rockets.jpg



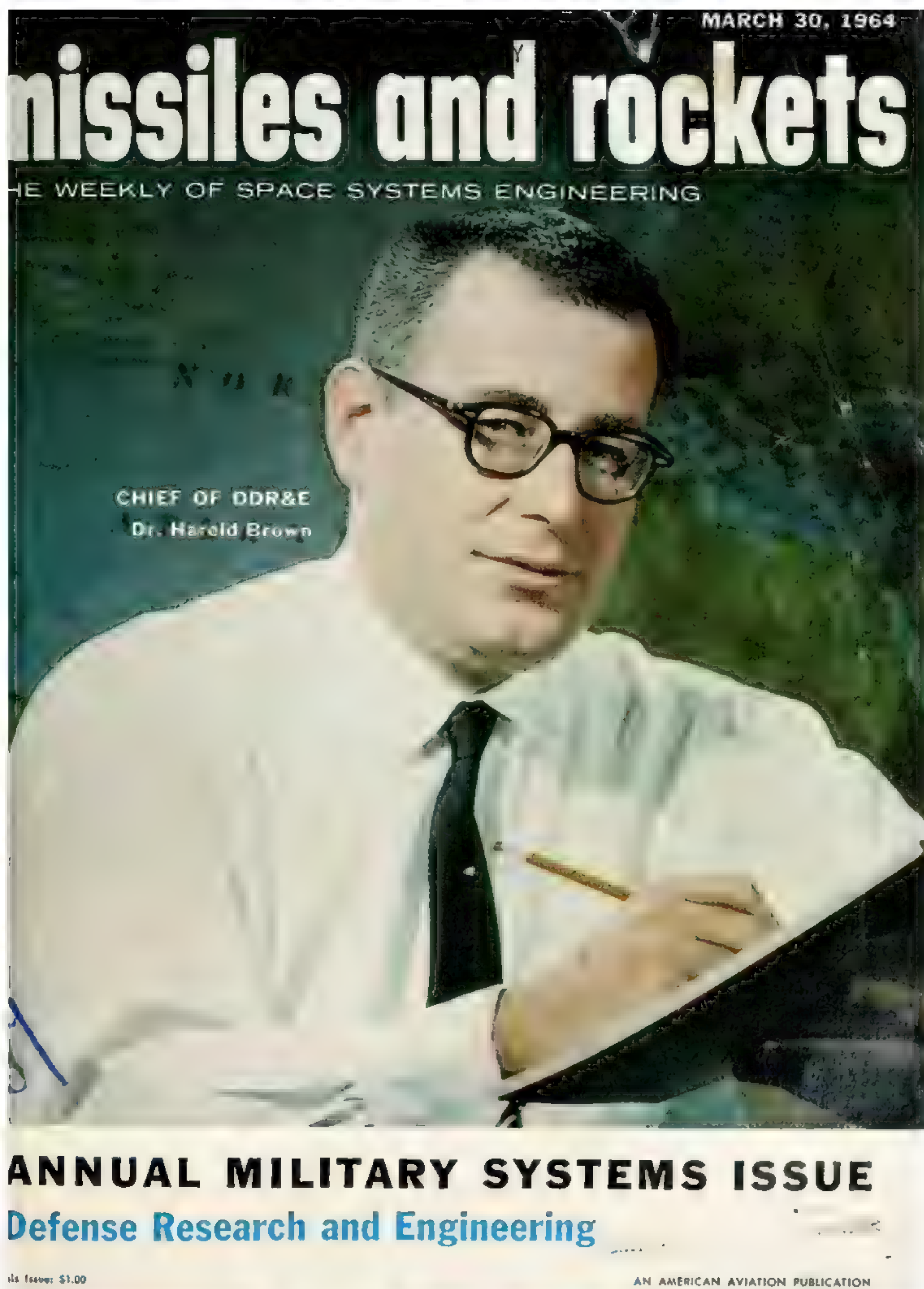
1964_03_09_Missiles_Rockets.jpg



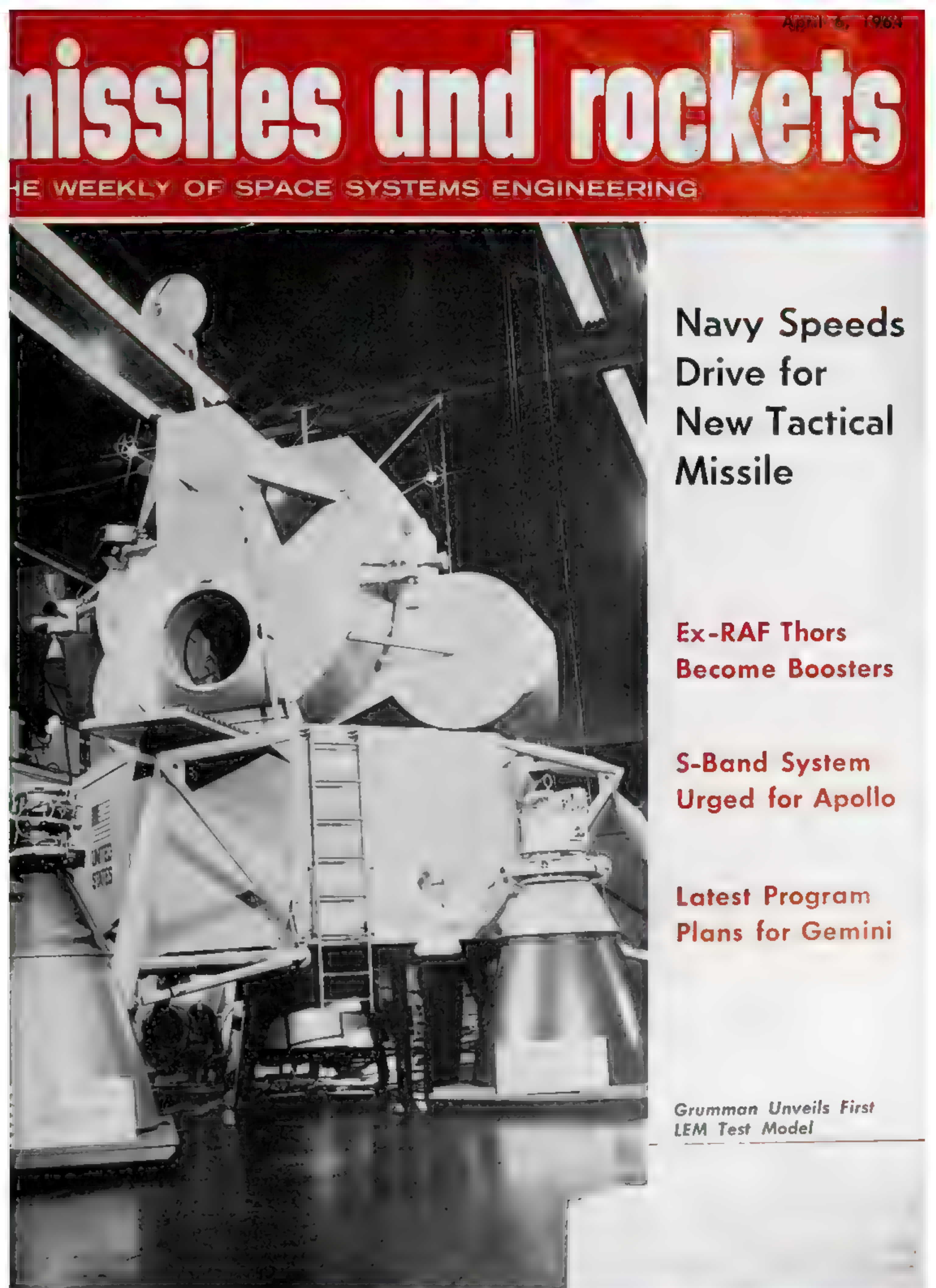
1964_03_16_Missiles_Rockets.jpg



1964_03_23_Missiles_Rockets.jpg



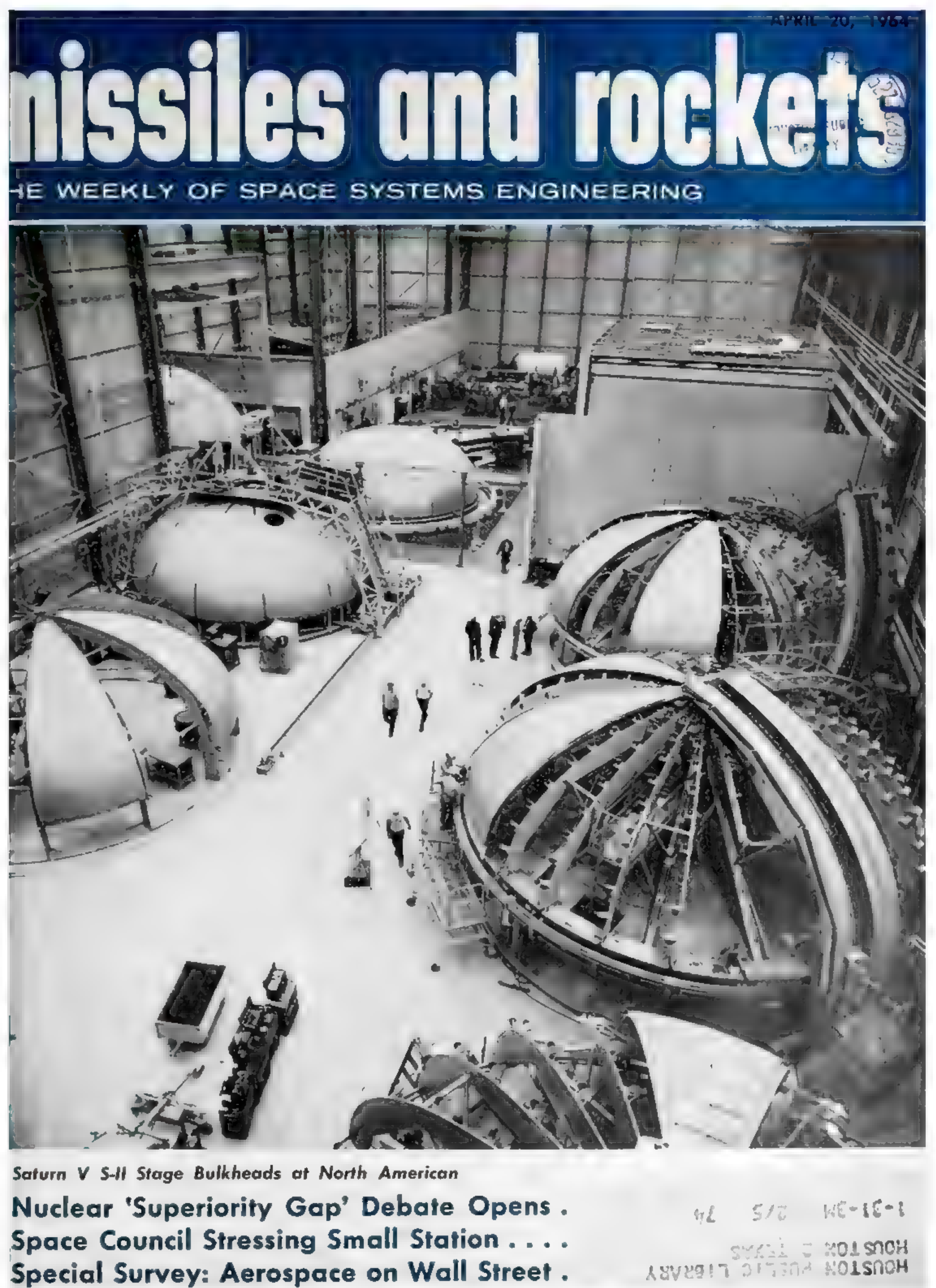
1964_03_30_Missiles_Rockets.jpg



1964_04_06_Missiles_Rockets.jpg



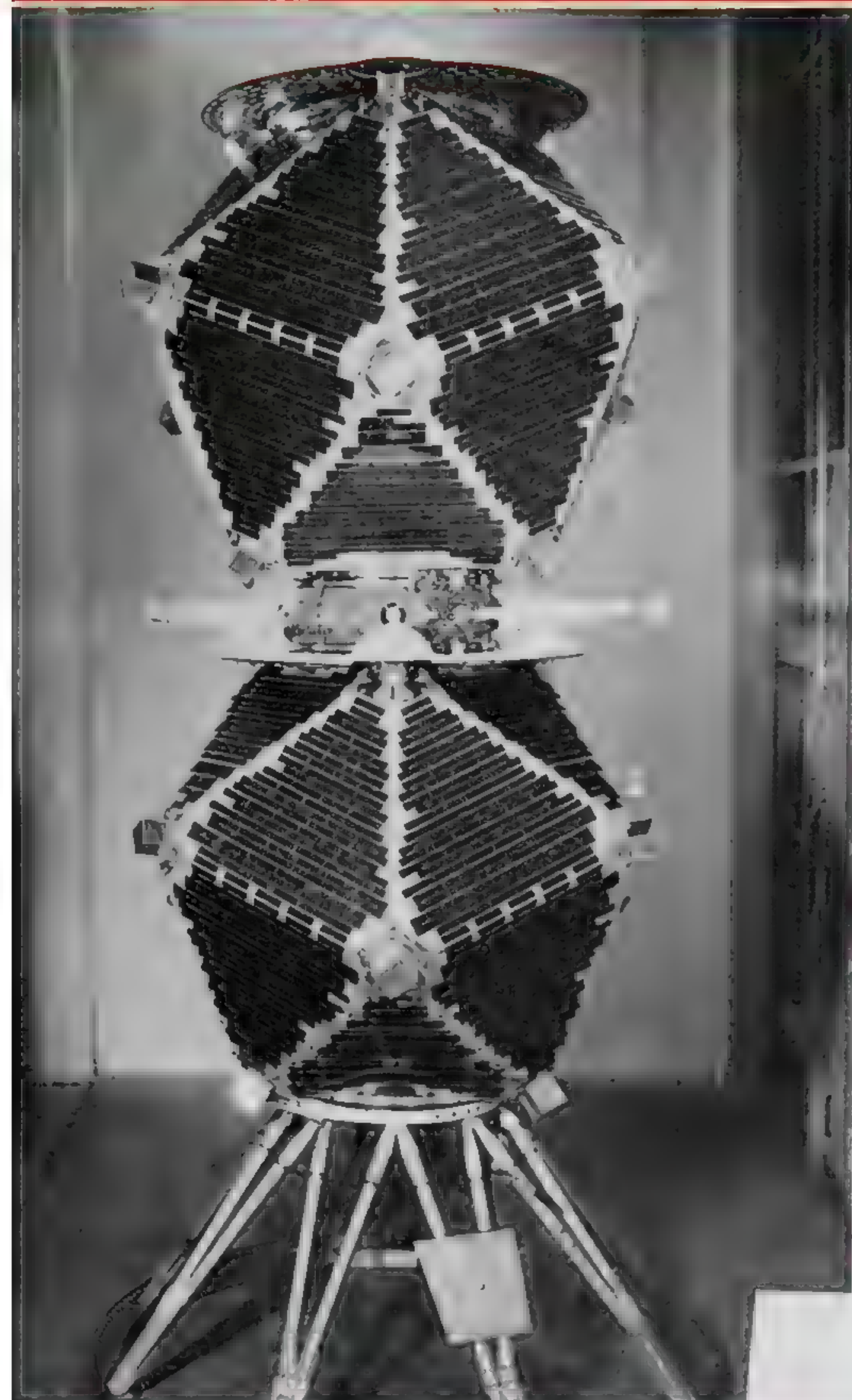
1964_04_13_Missiles_Rockets.jpg



1964_04_20_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**DOD Actively
Developing
Multiple
Warheads**

**Extended Apollo
Termed Essential**

**MMRBM Nears
Moment of Truth**

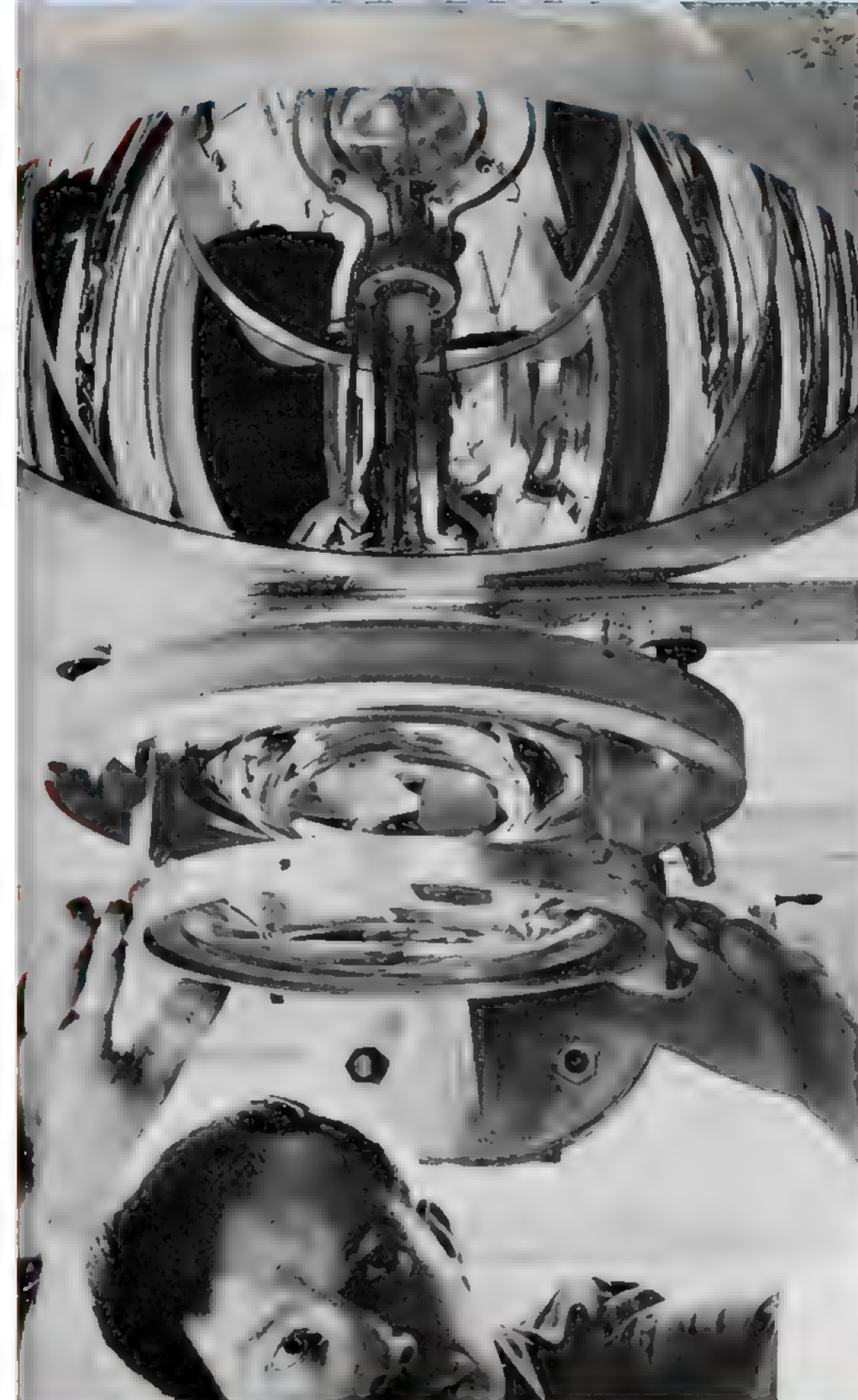
**120-in. Clusters
Urged for Saturn**

*Tandem Velas
at World's Fair*

1964_04_27_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**Johnson
Tells NASA
To Produce
Post-Apollo
Plans**

**NASA Split on
Ranger Findings**

**AF Seeks New
Missile Tracker**

**Gaseous-Core
Concept Gains**

*Checking Optical Module
In Goddard Simulator*

1964_05_04_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



GPI Readies Guidance for STAFF Flight

J.S. Developing Anti-Satellite Weapon . .

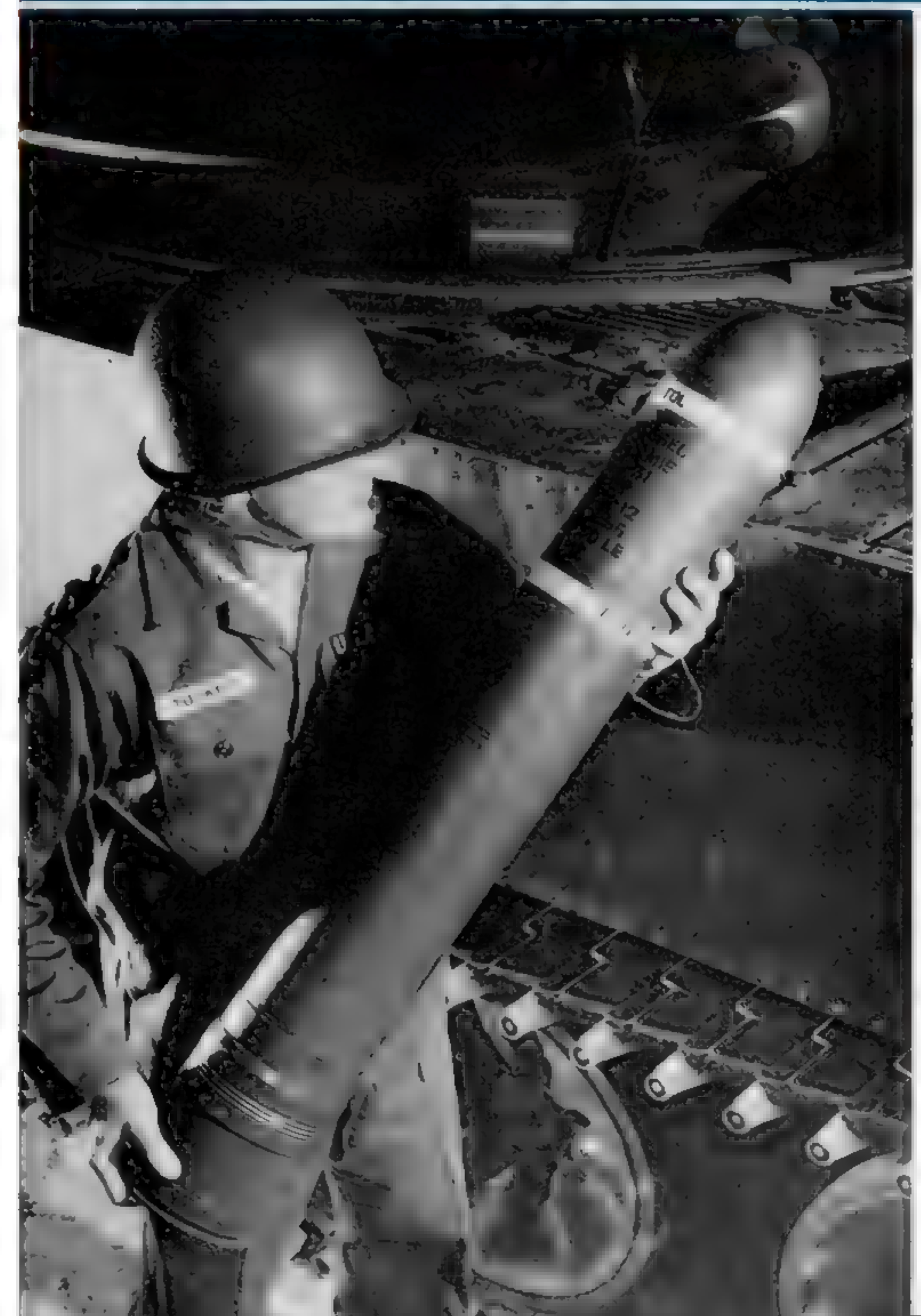
AF To Award Studies of 3-Module MOL .

Latest Edition of M/R's Astrolog

1964_05_11_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**Nike-X
Production
Decision
Hinges on
DOD Study**

**Ranger VII
Launch Deferred**

**Saturn IB/Centaur
Funds Predicted**

**Laser Tracking
System Detailed**

Soldier Hefts Shillelagh

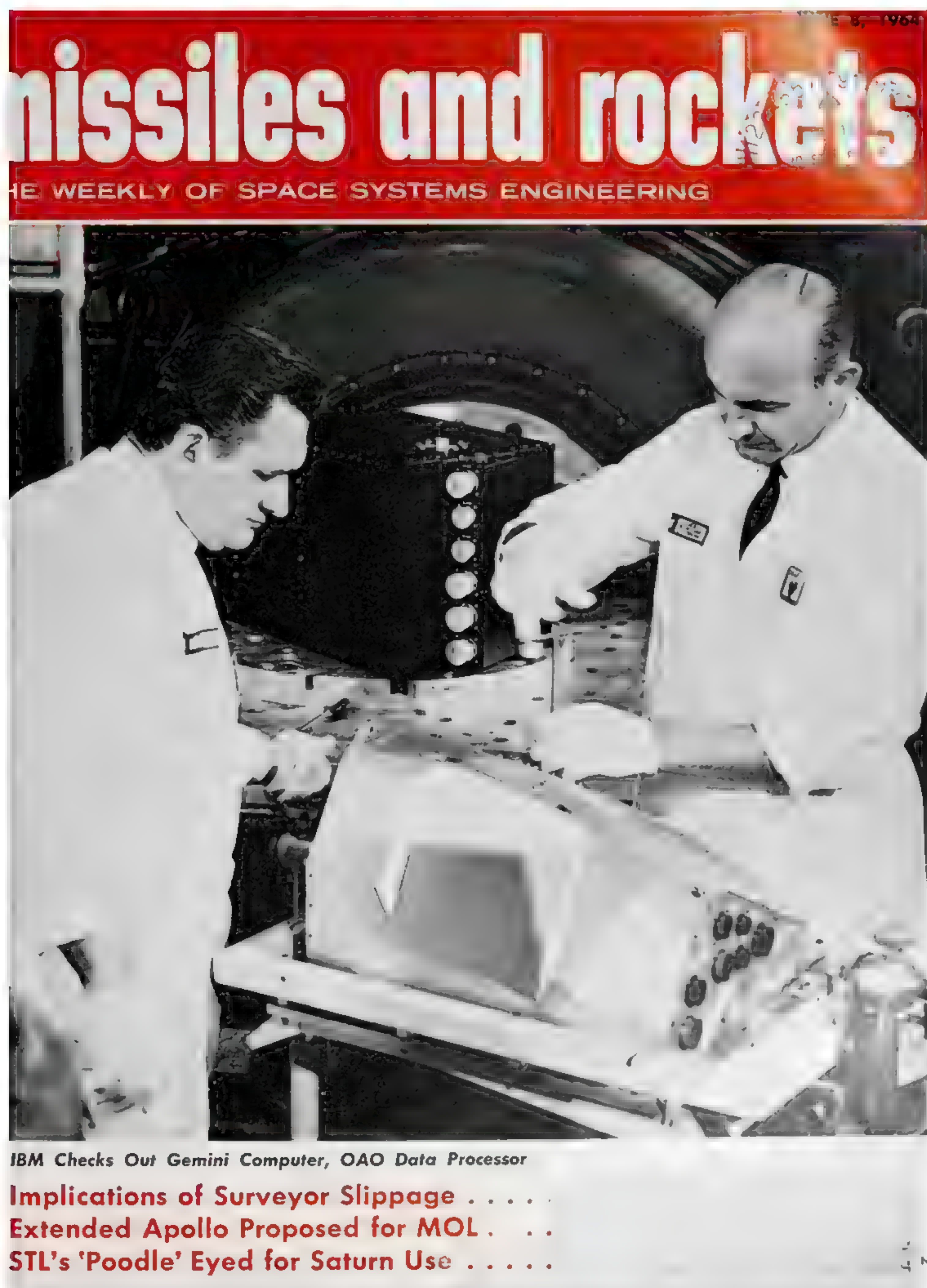
1964_05_18_Missiles_Rockets.jpg



1964_05_25_Missiles_Rockets.jpg



1964_06_01_Missiles_Rockets.jpg



1964_06_08_Missiles_Rockets.jpg



1964_06_15_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



First Photo of Boeing Lunar Orbiter Model

First Phase of Floxed Atlas Approved . .
House Group Raps Management of Rang
Northrop Choosing M-2, HL-10 Engines .

1964_06_22_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Preview Of
First Annual
AIAA Meet

Apollo Contract
To Be Extended

Spacecraft Shells
Interest Douglas

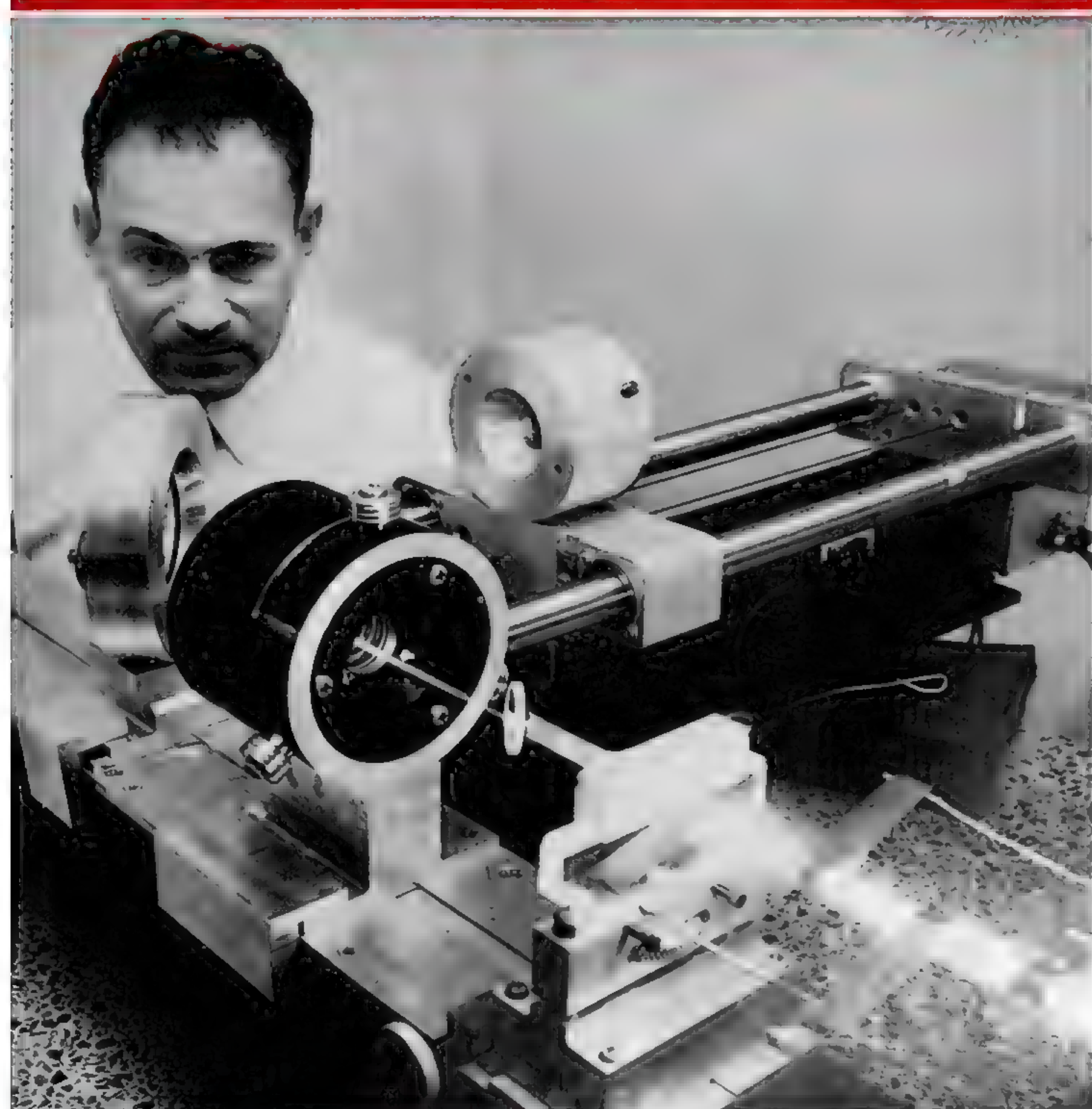
Martin Sensor
Holds Promise

RCA Unveils 'Stabilite'

1964_06_29_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Martin Doppler Laser Navigation Device

Report from First AIAA Convention
House Republicans Hit DOD Policies
Gemini Rendezvous Plans Outlined

1964_07_06_Missiles_Rockets.jpg

missiles and rockets

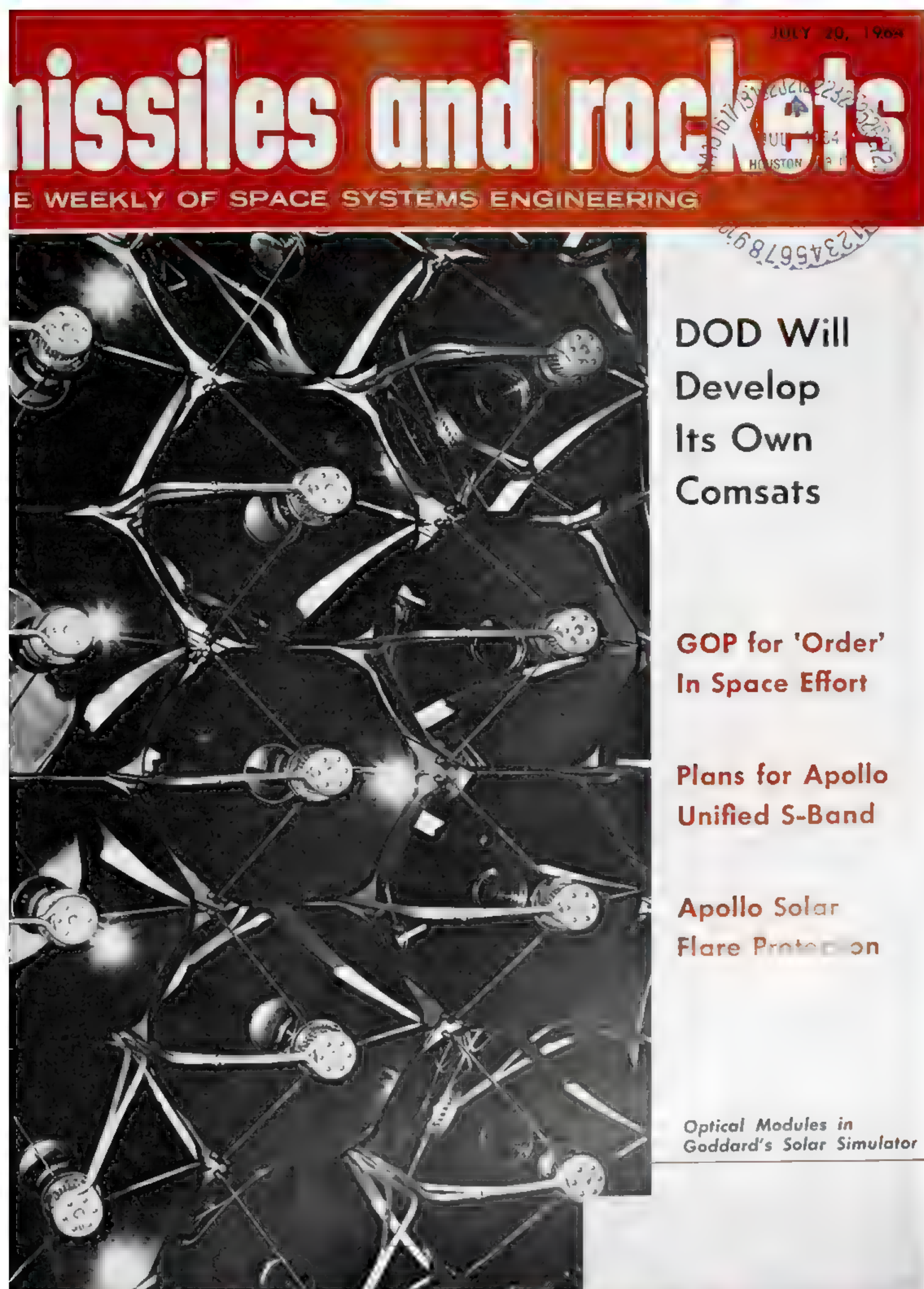
THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Prototype Project 465L Data Display Equipment at ITT

LASV Program Being Cancelled by DOD . .
New SAC C&C System Prototype Shown .
How Hercules Plant Meets Schedules . . .

1964_07_13_Missiles_Rockets.jpg



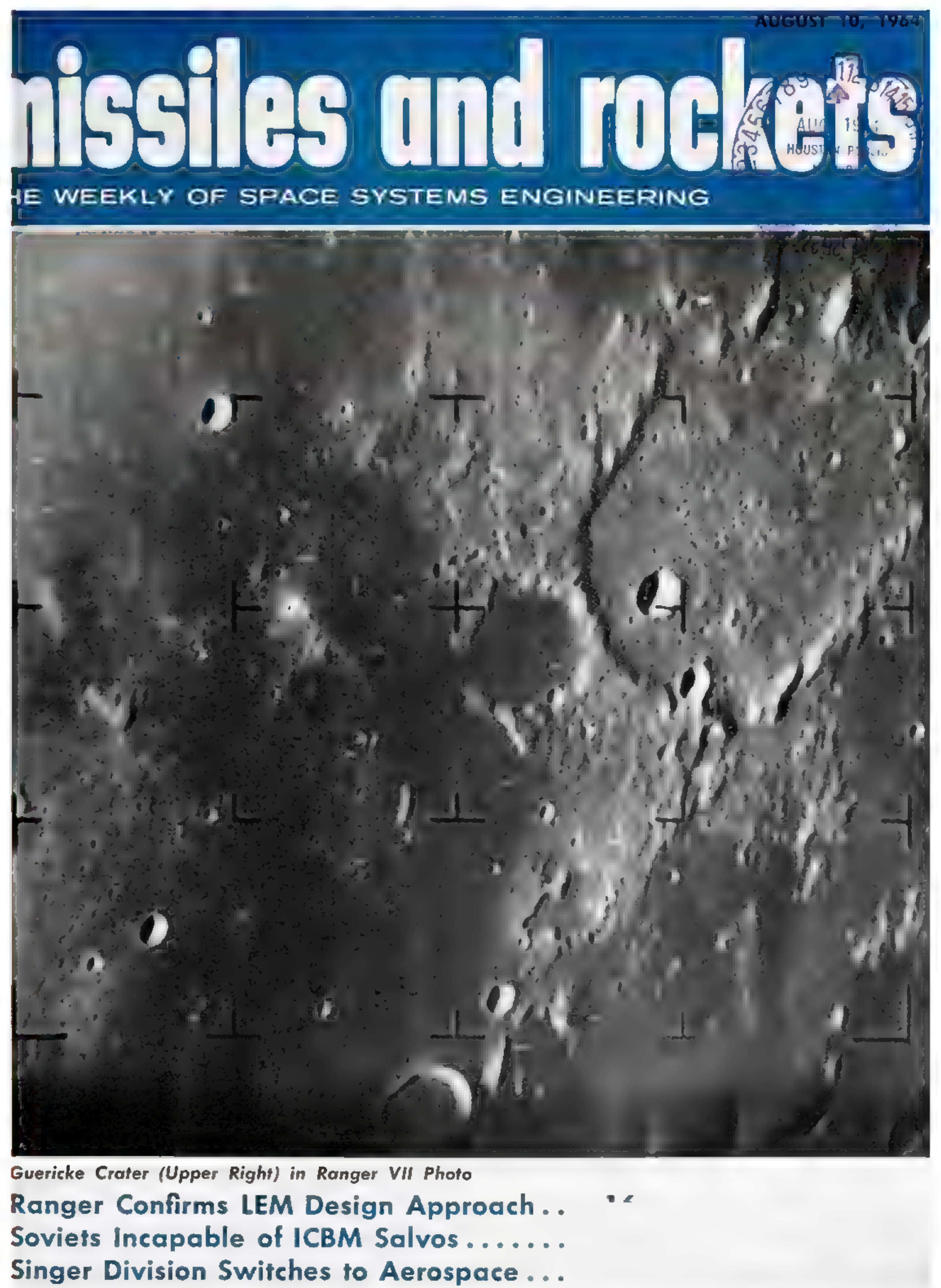
1964_07_20_Missiles_Rockets.jpg



1964_07_27_Missiles_Rockets.jpg



1964_08_03_Missiles_Rockets.jpg



1964_08_10_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**First ERC
Contracts Due
Within
2-3 Months**

**Defense Debate
Gets Warmer**

**DOD, ComSat
May Yet Agree**

**Hovercraft Eyed
As Transporters**

First Closeup of TAD

1964_08_17_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



First S-IB Booster at Chrysler-Michoud

LBJ To Get Report on NASA Plans Soon..

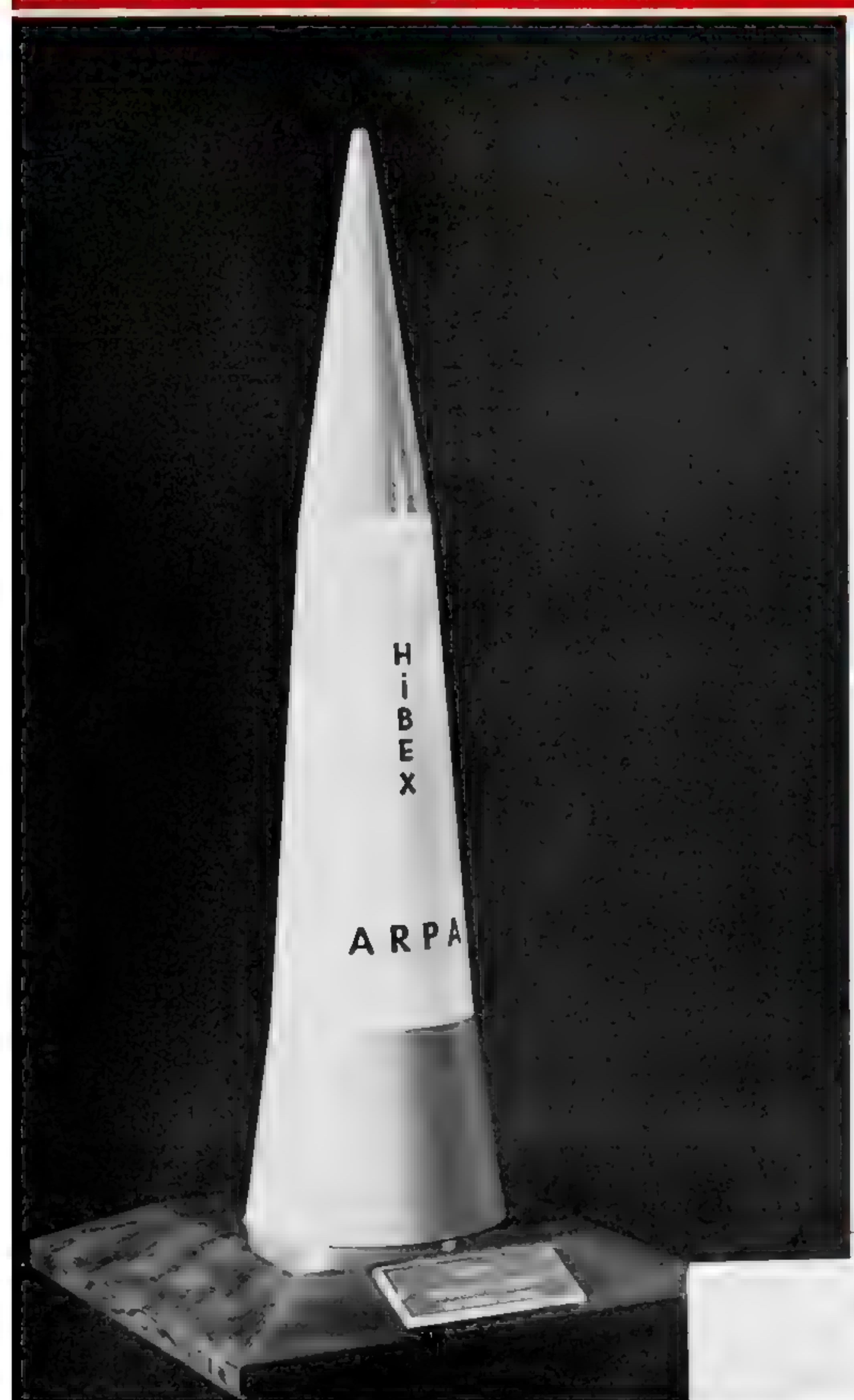
Syncom III Heads for Its Final Orbit.....

Systems Group Boosts Sperry Business...

1964_08_24_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**HIBEX
Firings
Scheduled
To Start
This Year**

**Non-Man-Rated
Titan III Urged**

**Report from
WESCON**

**Simulation
State of the Art**

First Photo of HIBEX Model

1964_08_31_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Surveyor Nose Fairing for Centaur

New Antitank/Assault Weapon Okayed

Vela Sensors Placed Near Aleutians...

EOS Uses Surface Tension for Energy...

1964_09_07_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Welding Titan III Motor Cases at Westinghouse

Cooperative Mood Pervades IAF Meet...

ComSat Corp. Stock Upswing Analyzed.

Latest Edition of M/R's Astrolog 43

AN AMERICAN AVIATION PUBLICATION

1964_09_14_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Lockheed P-3A ASW Plane 'Loiters' over Submarine

Ruina Replacing Bissell as IDA Chief...

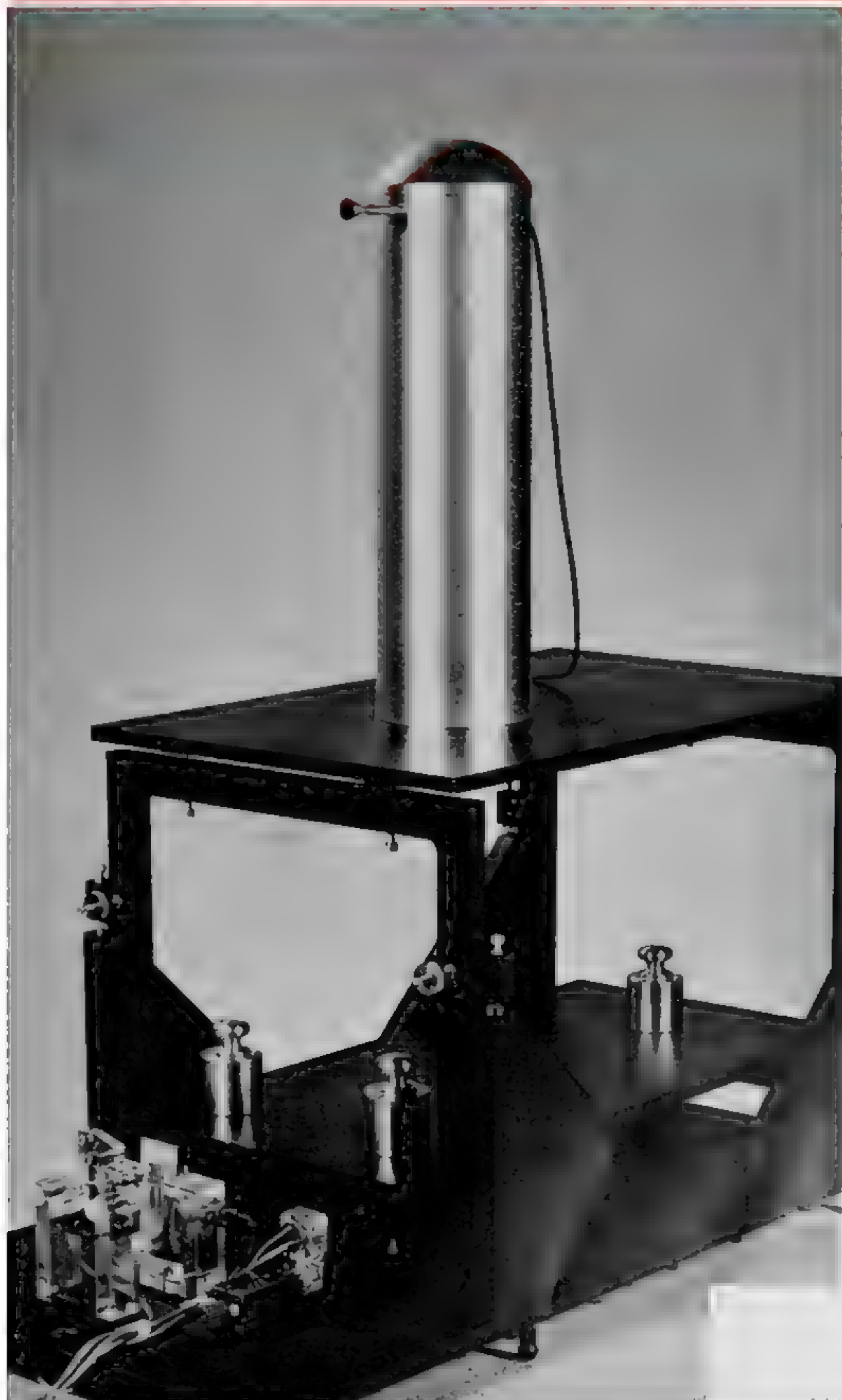
SPECIAL REPORT: ANTI-SUBMARINE WARF

How the U.S. Is Meeting the Threat...

1964_09_21_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Anti-Satellite Development Far From Completion

NASA Geodetic Satellite Plans

Valveless Rocket Produced at RRC

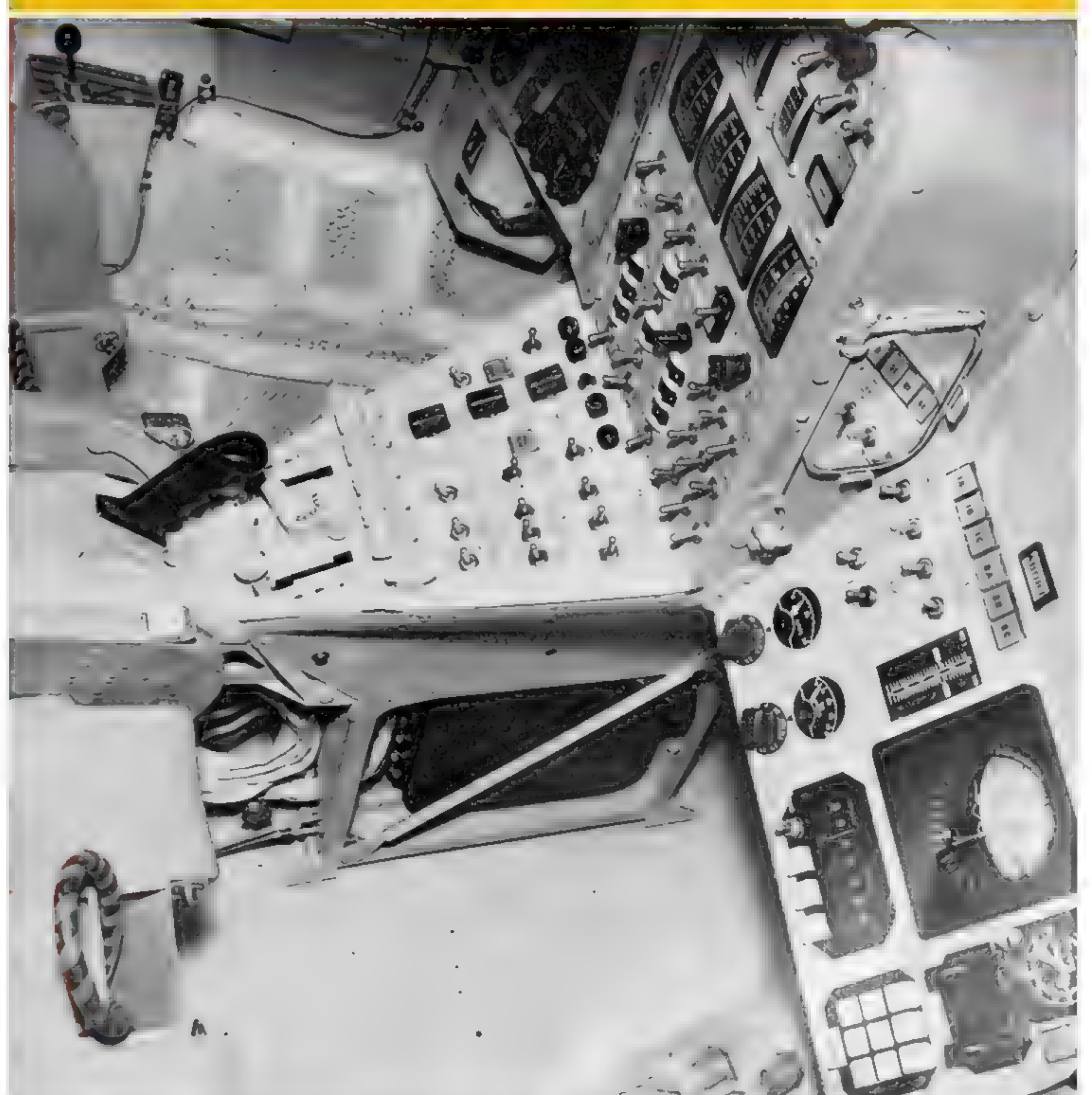
Minuteman Shock Testing Slate

Rocket Research Corp.'s New Valveless Rocket

1964_09_28_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Complex Display Units in Gemini Cockpit

New DOD Interest in 'Humane' Warfa

SPECIAL REPORT ON ADVANCED DISP

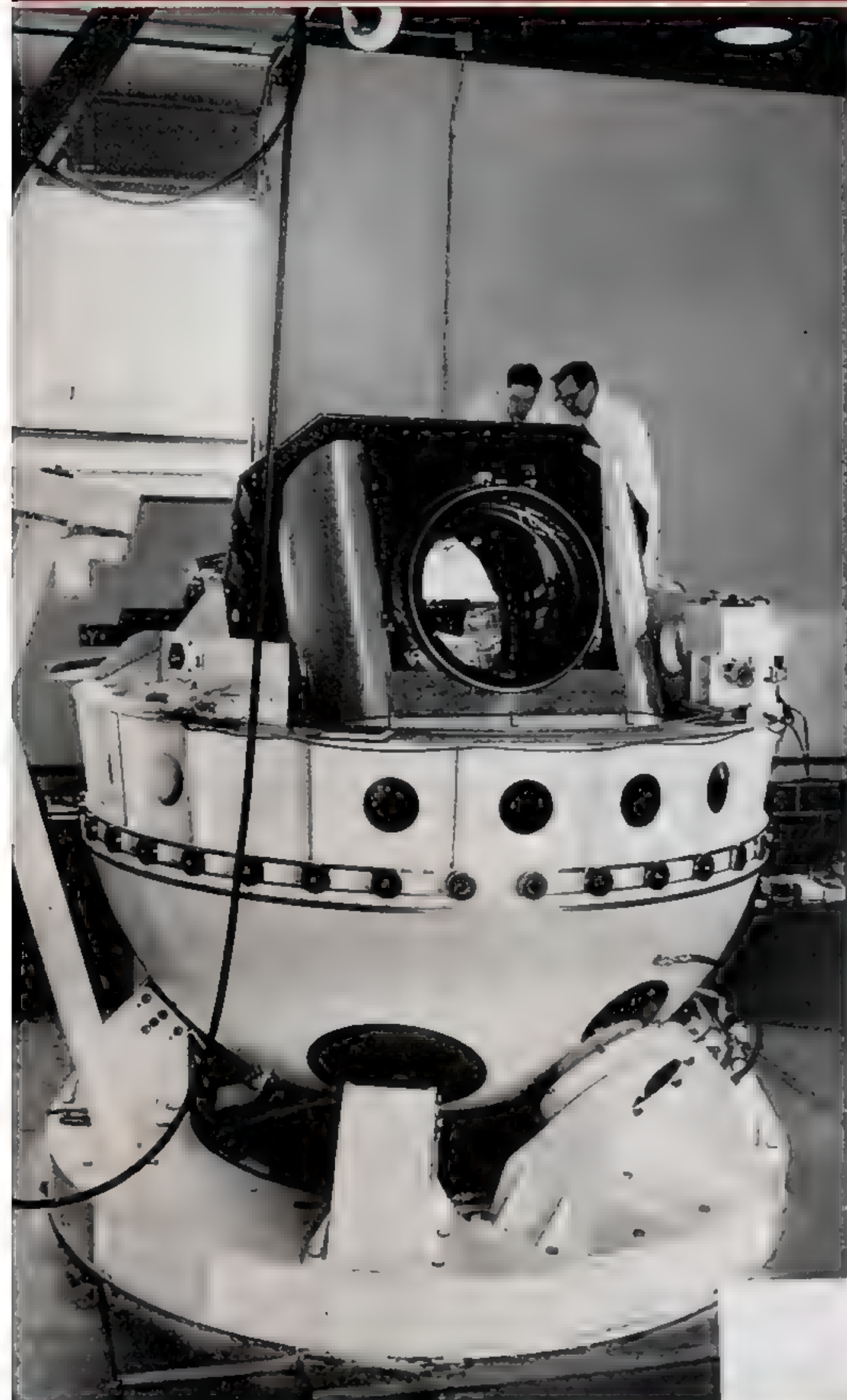
A Guide to Requirements and Mark

AN AMERICAN AVIATION PUBLICATION

1964_10_05_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**NATO
Planning
SAGE-Type
System**

**AF Studies New
Mobile Missile**

**'Big Rally II'
Now Operational**

**Ladish Forging
Big-Solid Rings**

*Perkin-Elmer's POSS
Spacetrack Telescope*

1964_10_12_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**NASA Plans
No 'Crash
Program'
Despite
Voskhod**

**ESRO To Buy
U.S. Equipment**

**IBM's Thin-film
Computer**

**AIAA Report on
Entry Problems**

*'Grating Lobe' Antenna
At Martin-Orlando*

1964_10_19_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



AEB Satellite at Goddard Antenna Test Range

Seamans Outlines Post-Apollo Plans ...

LBJ, Goldwater Missile/Space Stands ..

Lunar Orbiter Nears Design Review ...

1964_10_26_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Radar Antenna Radome Inspected at Goodyear

Navy Outlines Plans for ASMS System ...

Arma Div. Nears Fateful Decision

Weber's Gemini Pilot Ejection System

1964_11_02_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



SPECIAL REPORT— The Advance Of Hybrid Propulsion

Europeans Plan
Own Comsat Net

Go-Ahead Looms
For the MOL

Latest Edition
Of M/R Astrolog

Hybrid Firing at UTC-Coyote

1964_11_09_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



PHOTO REPORT Soviets Unveil New Missiles

Deep Seen in U.S.
Hunting for

QCYA Program
Warning of

James Allison
Demanding

First Photo of Sprint

1964_11_16_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



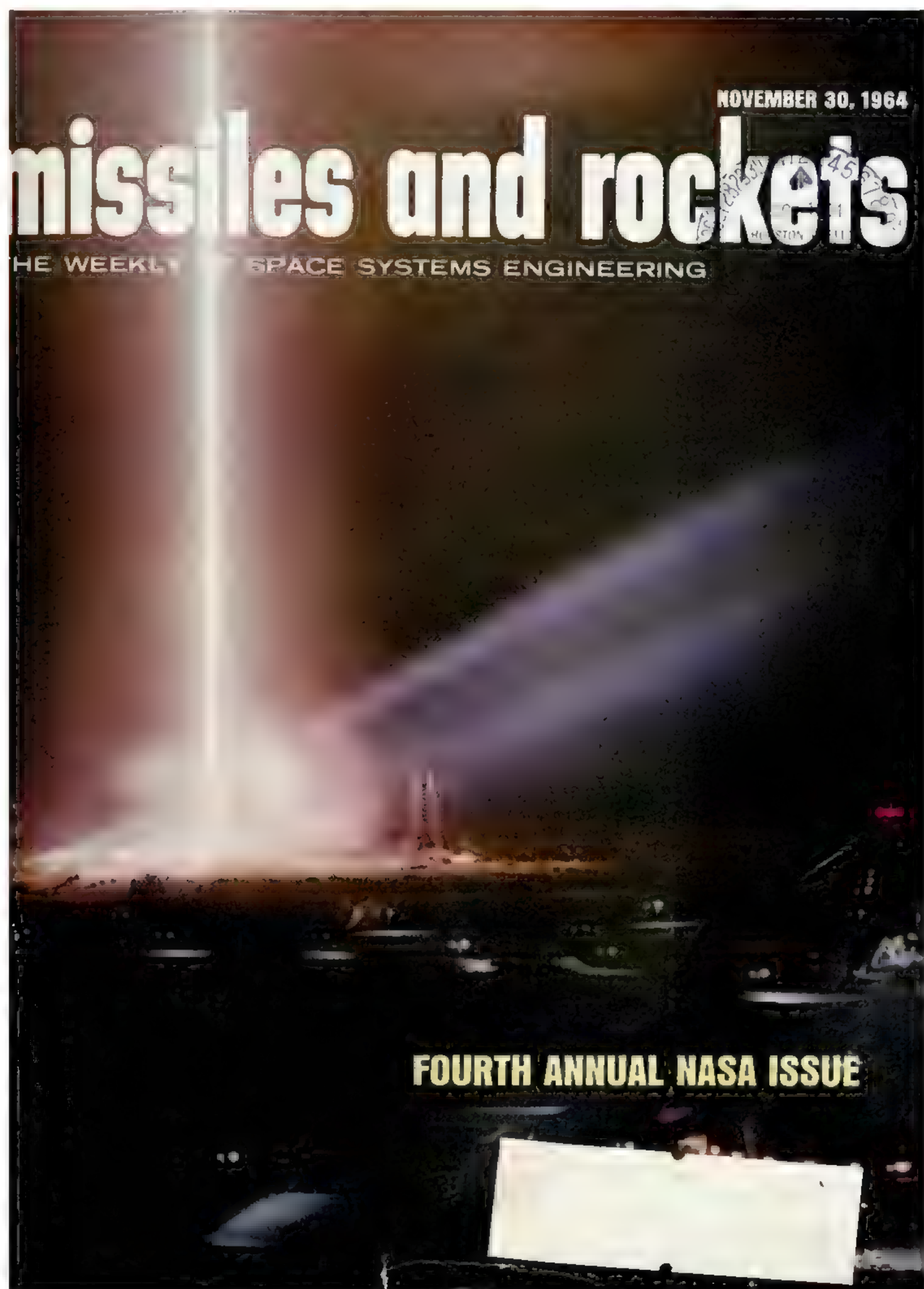
World's Biggest Glass Filament-Wound Structure

AUSA Gets First Public Sprint Display ...

Soviets See Helium Use in Spaceships ...

AF Pushes Work on IC Exploitation

1964_11_23_Missiles_Rockets.jpg



FOURTH ANNUAL NASA ISSUE

1964_11_30_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



Honeywell's Laser Integrating Gyro

**Fate of MOL Program Up for Decision,
Mariner Leading in Race Toward Mars
Low-G Accelerometers Demand Test De**

1964_12_07_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING



**NASA
In Dilemma
Over Orion
Project**

**Soviets Report
On Biosciences**

**C-W's Graphite
Nozzle Advance**

**Venus Swingby
Mode Gains Favor**

**Successful Apollo Abort
Test Aboard Little Joe II**

1964_12_14_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF SPACE SYSTEMS ENGINEERING

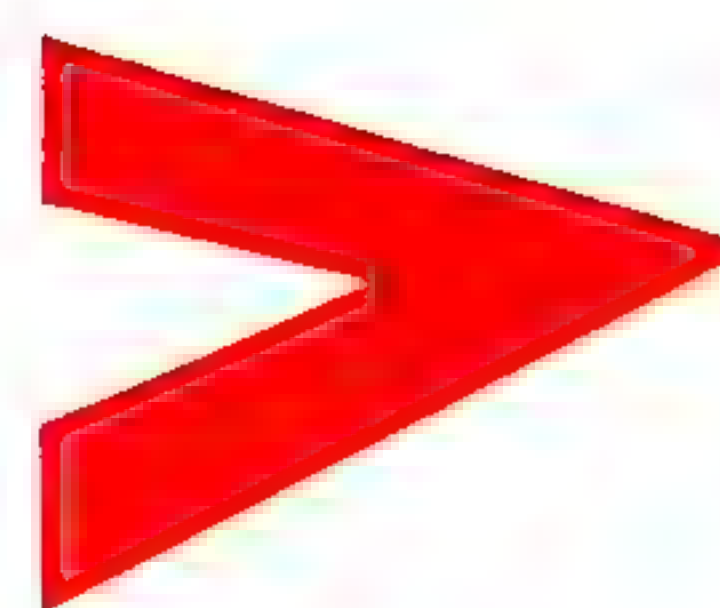


Navy's Aerojet Mk 46-0 Solid-Rocket Torpedo

**MOL Gets Full-Scale Development Okay
DOD Ponders New 156-in. Solid Awards
AES Manned Lunar Orbit Plans Listed ...**

1964_12_21_Missiles_Rockets.jpg

missiles and rockets



MAGAZINE OF WORLD ASTRONAUTICS



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1965

Volume 16, No. 1-26 (January 4, 1965 to June 28, 1965)

Volume 17, No. 1-25 (July 5, 1965 to December 20, 1965)
(*Dec 27, 1965 was not issued)

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Nike-X
Threat
Analysis
Study
Completed

Huge Forging
Press Planned

MOL Biomed
Tests Defined

Cape's New
Telemetry System

Dummy LEM Adapter Section
Flown to Cape Kennedy

1965_01_04_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Antenna Test Models at TRW Space Technology Laboratories

RAM RFP's To Be Sent Out Shortly
Interest Quickens in Emulsion Potential . .
Latest Edition of M/R's Astrolog 21

AN AMERICAN AVIATION PUBLICATION

1965_01_11_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



an ILL-C Solid Motors at Cape Kennedy

OD Studies City-Defense A-ICBM
Description for Industry Stabilization
MORL Electronics May Be Off-the-Shelf . .

1965_01_18_Missiles_Rockets.jpg

missiles and rockets

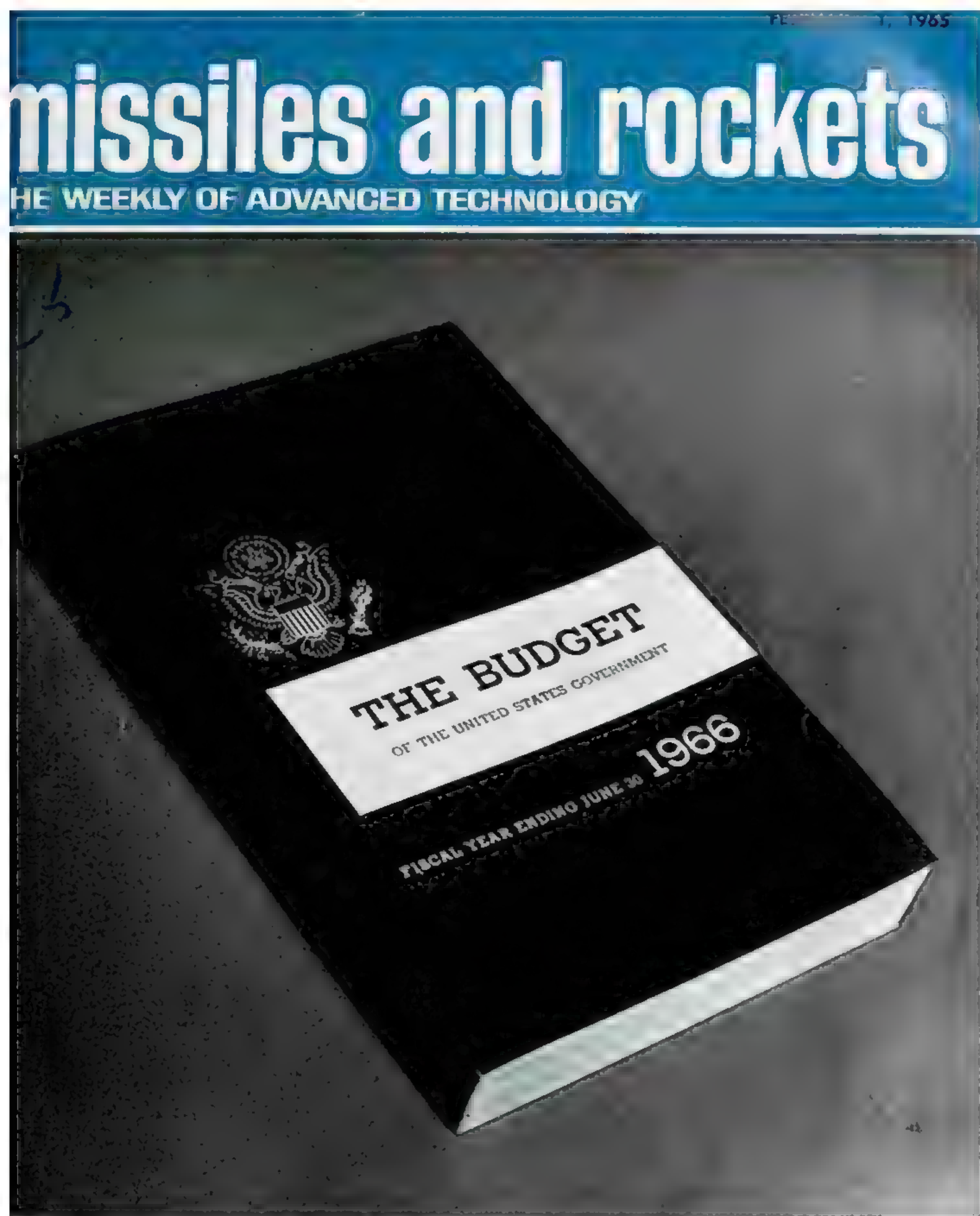
THE WEEKLY OF ADVANCED TECHNOLOGY



mandrel for Aerojet-General's 260-in. Motor

Poseidon Program To Cost \$2 Billion
Planned Gemini Flight May Come in April .
Sokol's Surveyor Engine Development . . .

1965_01_25_Missiles_Rockets.jpg

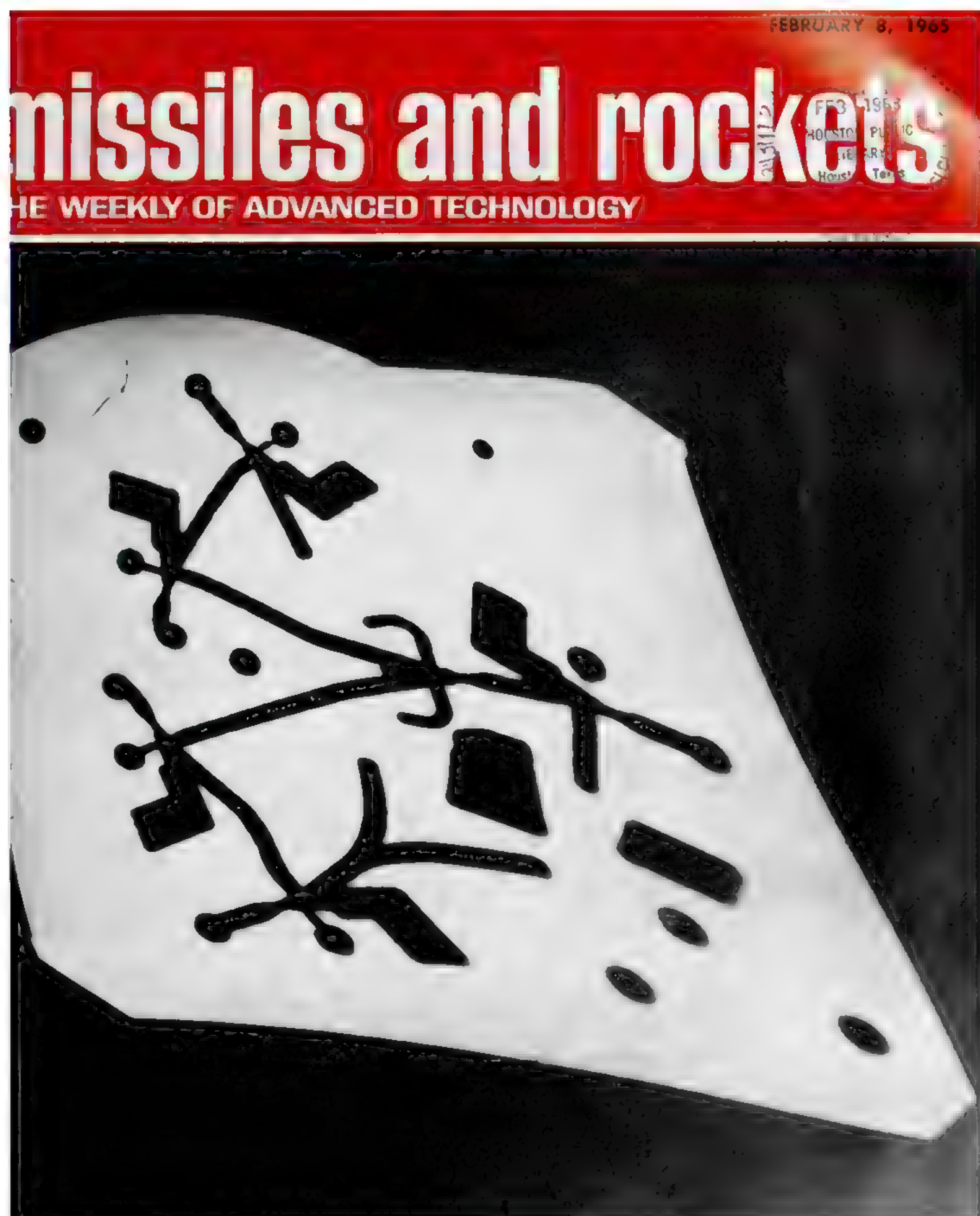


Copy of the FY 1966 Budget—Space Spending Up

SPECIAL REPORT ON THE BUDGET

AN AMERICAN AVIATION PUBLICATION

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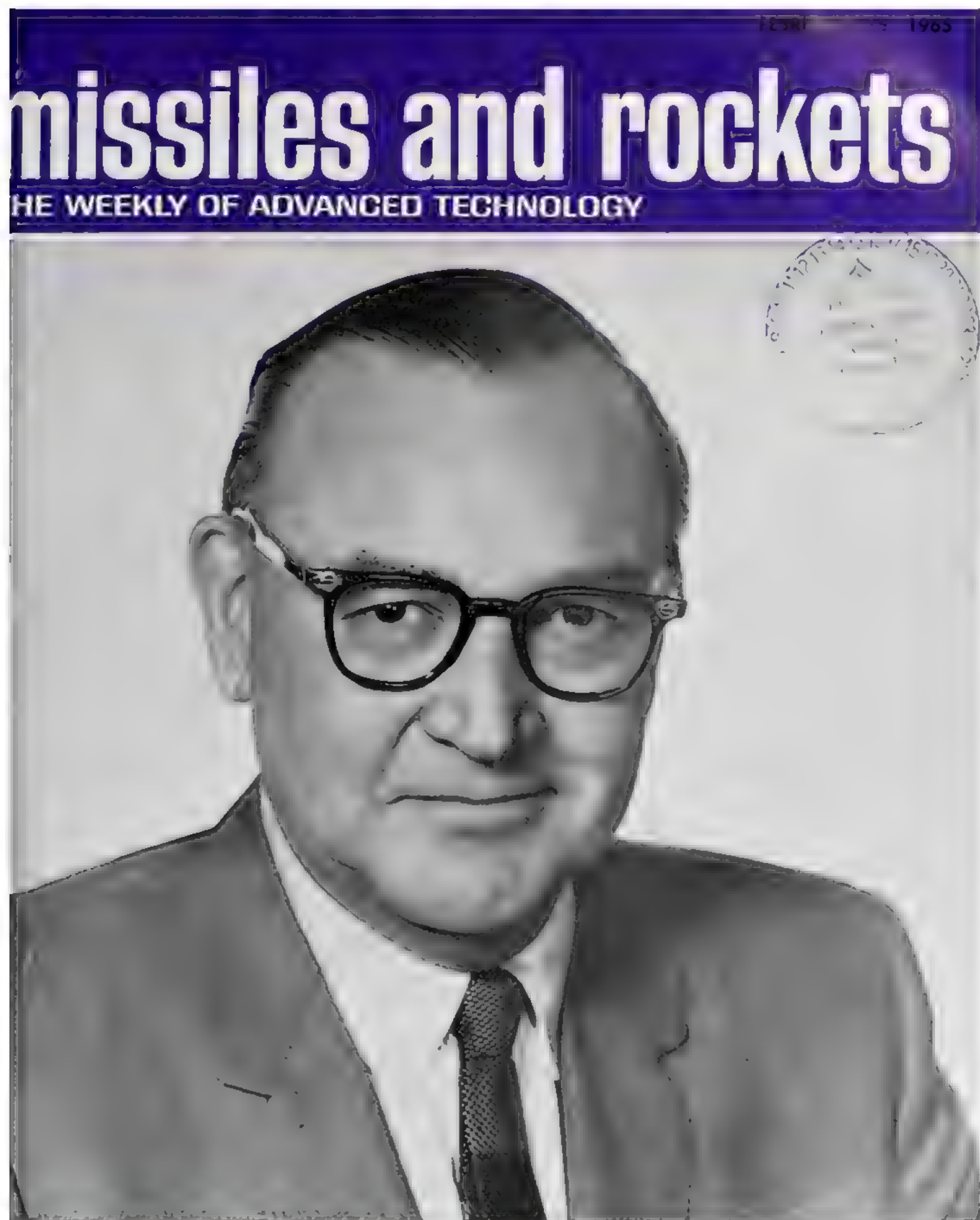
Fluidic Logic Plane from Martin-Orlando

ABRES Yields Re-entry Scaling Laws . . .

SPECIAL REPORT—

The Fast-Growing Field of Fluidics . . .

1965_02_08_Missiles_Rockets.jpg



Gov. Edmund G. Brown: Hard Tasks for Missile/Space Firm

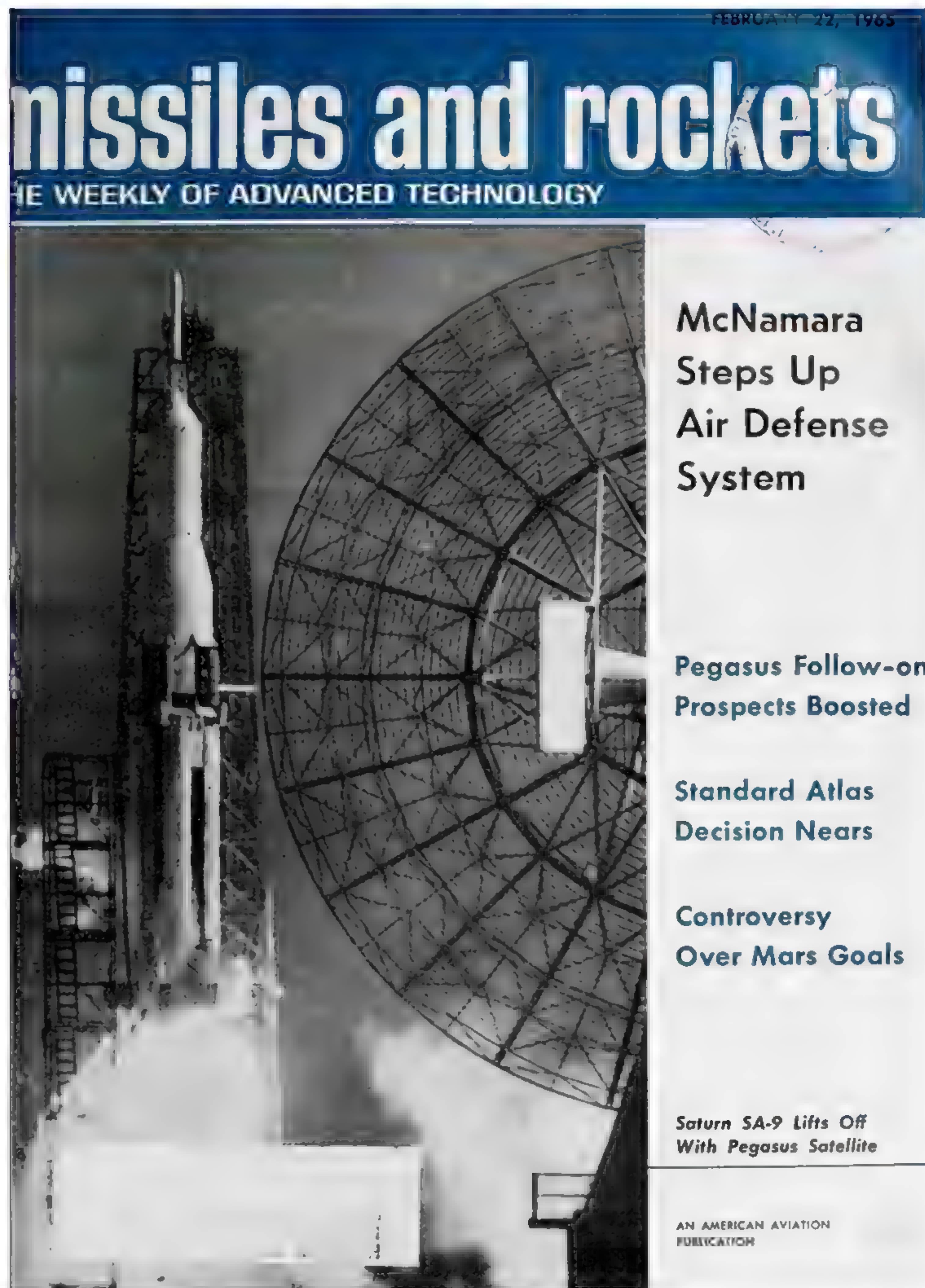
Webb Says Mariner Will Beat Zond to N

SPECIAL REPORT—

California Looks at Advanced Technology . . 24

AN AMERICAN AVIATION PUBLICATION

1965_02_15_Missiles_Rockets.jpg



McNamara
Steps Up
Air Defense
System

Pegasus Follow-on
Prospects Boosted

Standard Atlas
Decision Nears

Controversy
Over Mars Goals

Saturn SA-9 Lifts Off
With Pegasus Satellite

AN AMERICAN AVIATION
PUBLICATION

1965_02_22_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Ranger IX
May Study
Surveyor
Landing
Site

MOL Study
Awards Due Soon

Versatility Key
To Voyager Plans

LPC Eyes Small
Motor Market

Surveyor Model Mated
To Centaur Nose Fairing

1965_03_01_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



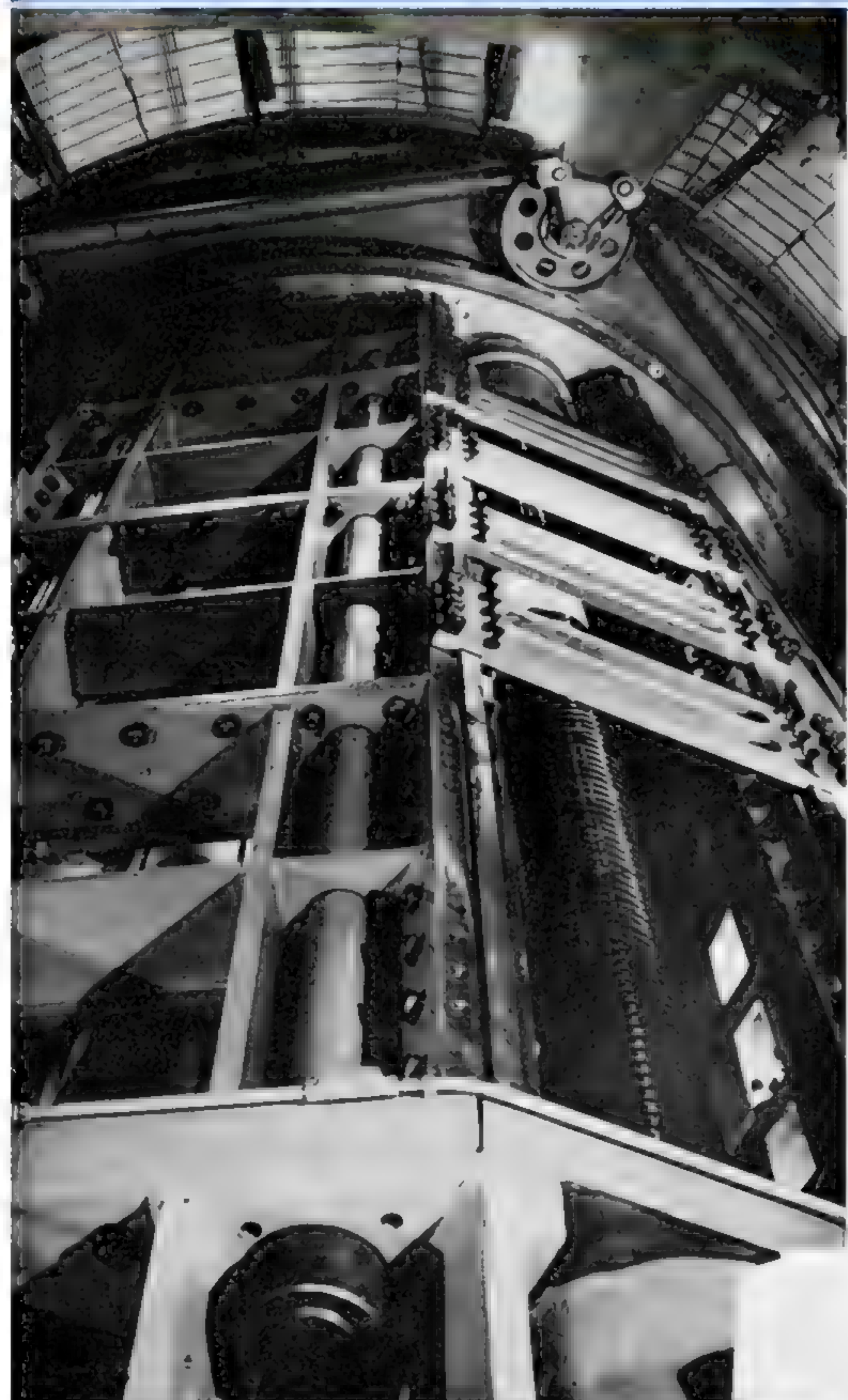
Martin SV-5 Model in Flight Test

NASA Cures Apollo's Shield Problem...
156-in. Firing Raises Big Solid Stock...
Latest Edition of M/R's Astrolog.....

1965_03_08_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Flying
Submersible
Now Proven
Feasible

Voyager To Avoid
Surveyor Snags

Roll-Extruder
Ideal for Motors

Building Delays
Snarl MILA Plans

NTW's Unique and Massive
Roll-Extrusion Machine

1965_03_15_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Sea Sparrow
Considered
For Point
Defense Role

NASA Funding
Bill Progresses

GE's High-Speed
18-lb. Computer

AF Plans for
Orbiting Animals

Air Force Stacks Nikes
For Re-entry Chute Tests

1965_03_22_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY

MARCH 29, 1965



FOURTH ANNUAL

1965_03_29_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY

APRIL 5, 1965



Army Tests Aeronutronic's Shillelagh Sight

Gemini Extravehicular Capability Pu

EOS Triples Efficiency of Ion Engines

Evaluation of Ranger Program—Part I

PLICATION

1965_04_05_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY

APRIL 12, 1965



TRW/STL Comsat Entry Goes Into Simulator

Early Bird Operations May Be Speeded

House Group Asks LBJ for MOL Ruling .

Ranger Evaluation Report—Part II

1965_04_12_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY

APRIL 19, 1965



DOD Okays
Two Pre-MOL
Flight Tests

MSFC To Run
Saturn/Centaur

Navy Develops
Solids Monitor

New Product
Of Year Chosen

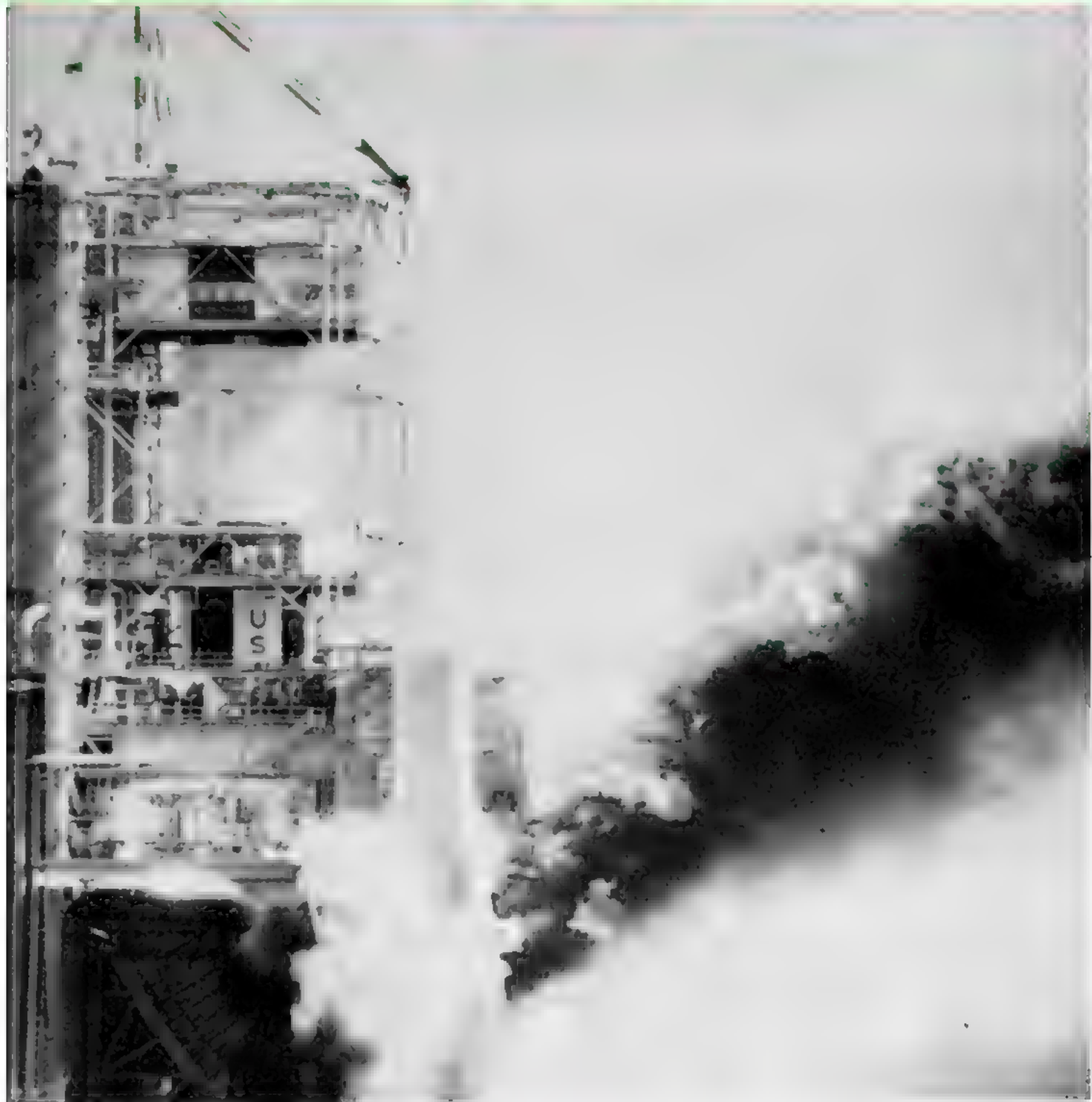
S-II Stage of Saturn V
In NAA Static Test Facility

1965_04_19_Missiles_Rockets.jpg

APRIL 26, 1965

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



S-IC Stage of Saturn V Tested at Huntsville

NASA's Isotope Needs To Rise Sharply
MOL Program May Go Beyond Six Shots
Apollo Spacesuit Design Overhauled

1965_04_26_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Aerojet Ships Core for 260-in. Solid Motor

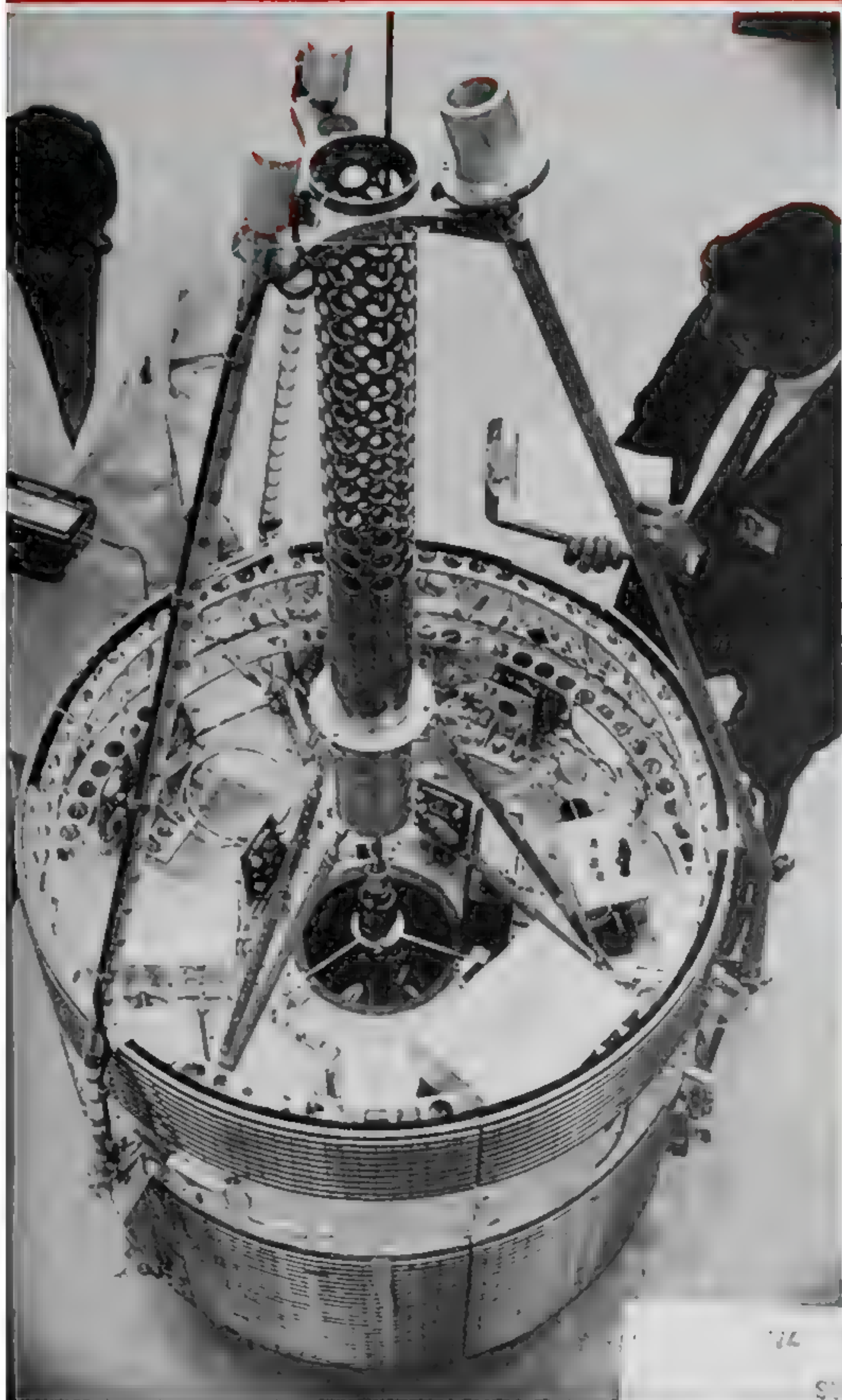
Eurospace Seeks U.S. Cooperation ...
JPL To Get Voyager Management To
Powerful Hybrid Booster Proposed ...

1965_05_03_Missiles_Rockets.jpg

MAY 10, 1965

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Soviets
Reveal Mars
Probe
Failure

TOW-Shillelagh
Decision Near

Bendix Lunar
Surface 'Samples'

Latest Edition
Of M/R Astrolog

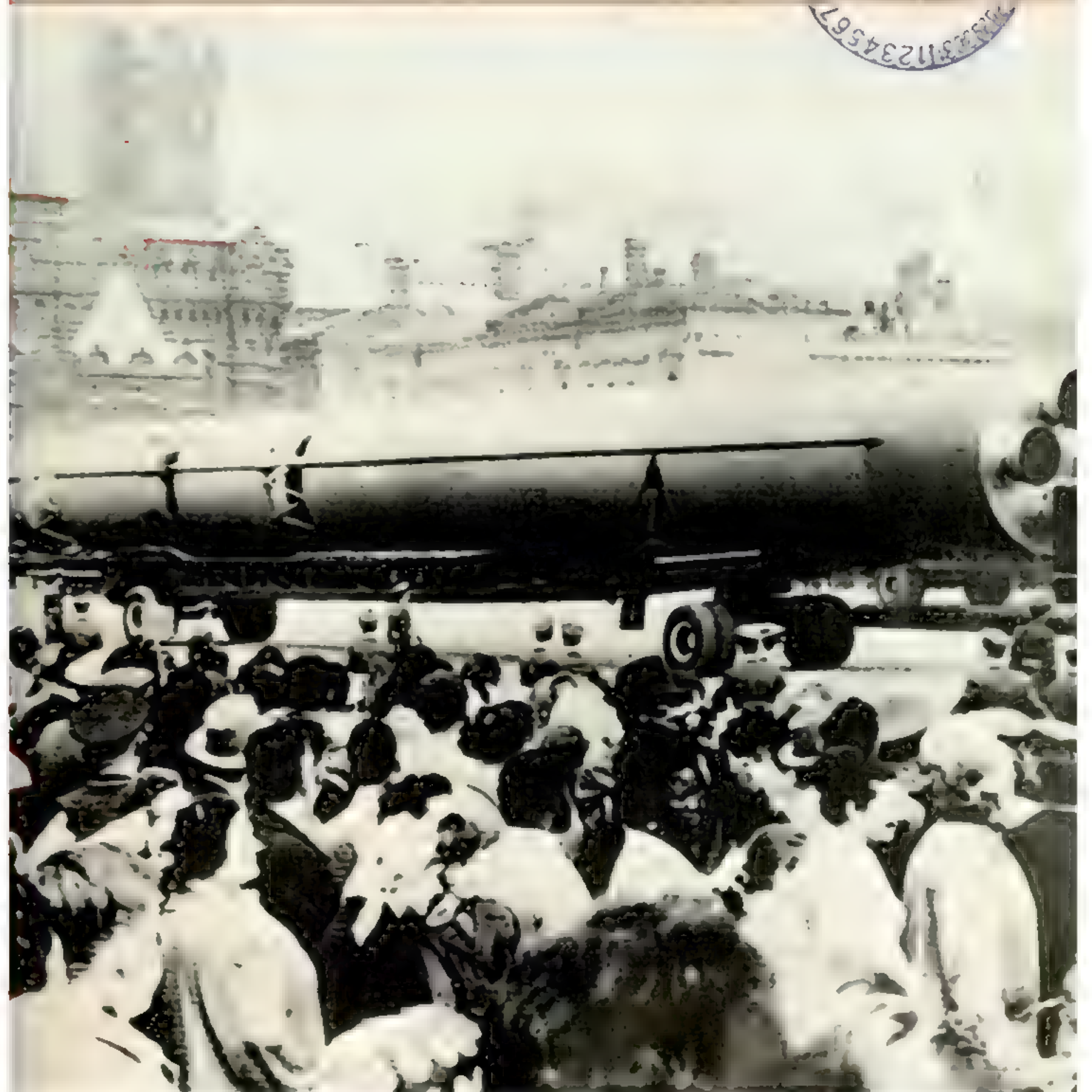
Interplanetary Pioneer
Tested at TRW/STL

1965_05_10_Missiles_Rockets.jpg

MAY 17, 1965

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



ggest Soviet Missile in Moscow Parade

Mr. SLV-3X CHIV 000/HAGN
Chrysler Designs Manned Obser
Missiles for European Launch

1965_05_17_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



First Photo of First Sprint Launching

Schriever Discloses MIDAS Progress.....
Report from COSPAR Argentine Me
Integrated Missile TM/MDI Propose

1965_05_24_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



NERC Director Kock and Top Assistants

GT-4 Astronaut Plans to Leave Capsul
AN M/R SPECIAL REPORT—
NASA'S New Electronics Research C

1965_05_31_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



White's Walk
In Space
Is Success

Immediate MOL
Initiation Sought

AES Feasibility
Studies Imminent

Optical Imager
Eyed as Radar

First AF Titan III-C
Poised for Launch

1965_06_07_Missiles_Rockets.jpg

missiles and rockets

THE WEEKLY OF ADVANCED TECHNOLOGY



Gemini 4
Spurs Role of
Military
in Space

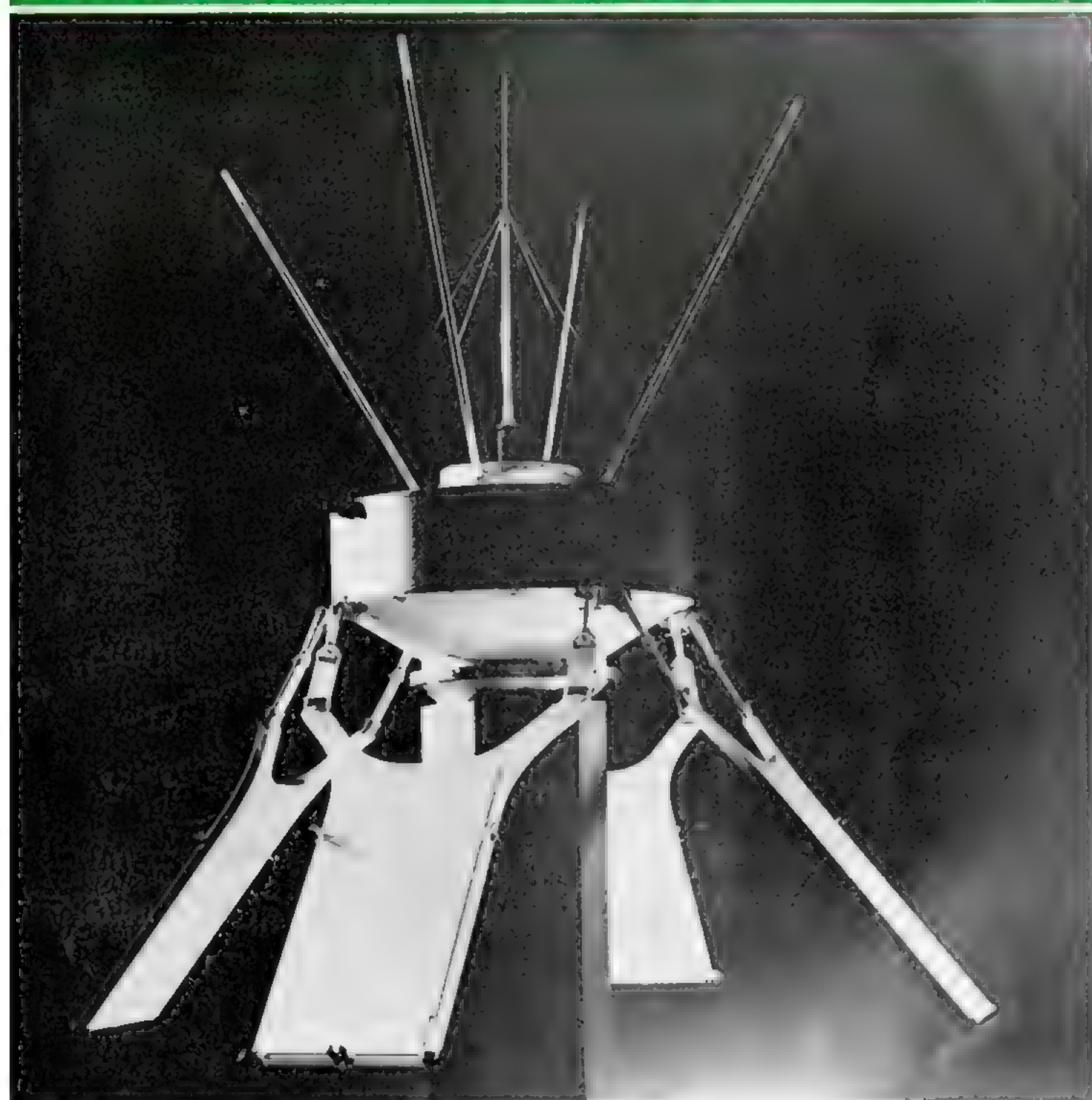
Upgrading Set
for ICBM's

British Polaris
on Schedule

AF Materials
Meet Detailed

White Begins His
Historic Space Walk

1965_06_14_Missiles_Rockets.jpg



Model of France's D-1 Satellite at Paris Air Show

Two Firms Likely for AES Integration
Part I of Report on Paris Air Show.
Keltec Develops Unique Comsat Ant

1965_06_21_Missiles_Rockets.jpg



**Titan III-C
Vindicates
Strap-on
Solids
Supporters**

**GT-5 Will Test
Rendezvous Radar**

**Radford—Top U.S.
Ordnance Plant**

**Paris Air Show—
Part II**

**Titan III-C—Biggest
Booster Ever Launched**

1965_06_28_Missiles_Rockets.jpg



**French
Strategic
Missile
Program
Advances**

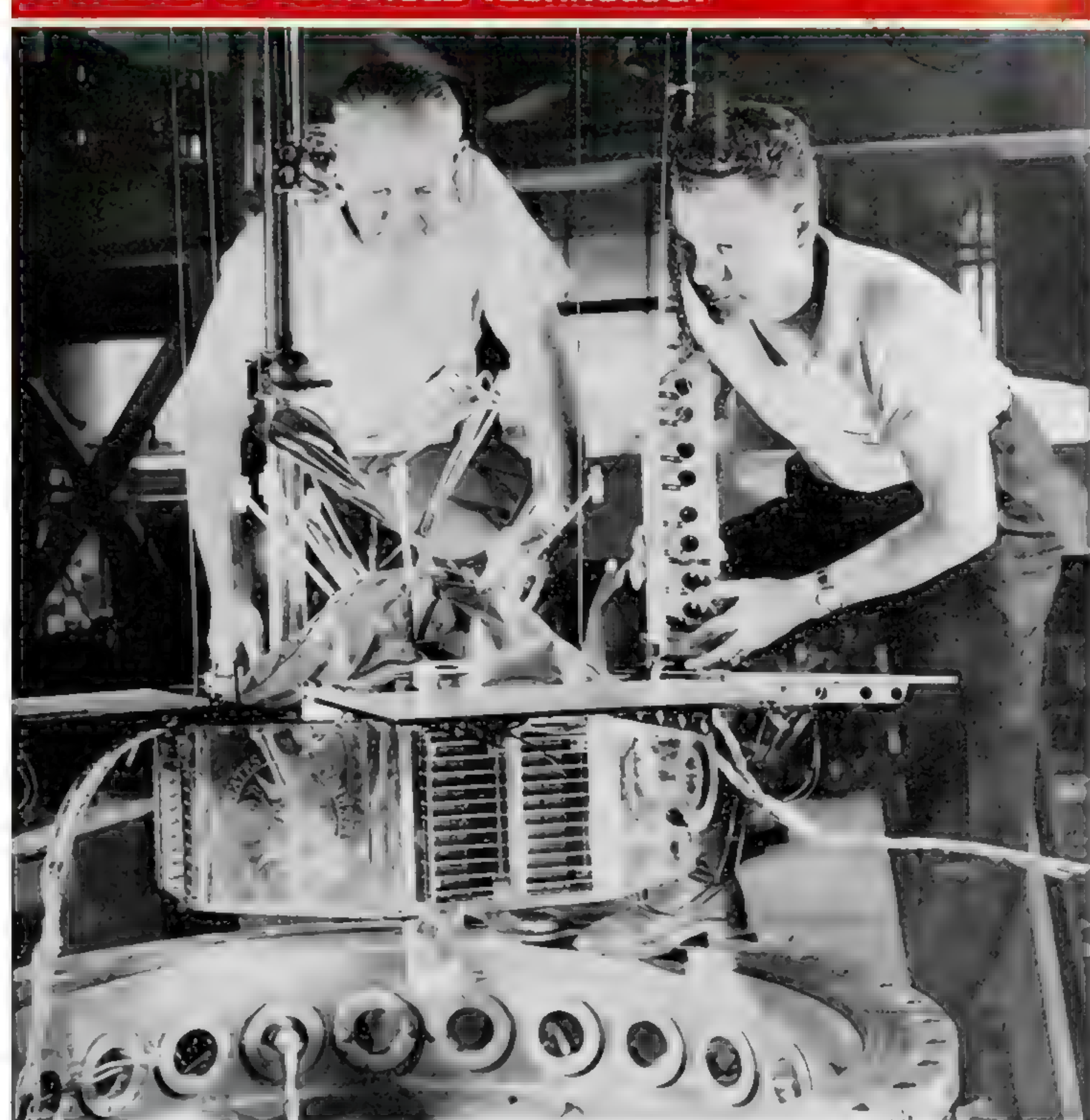
**Voyager Capsule
RFP Target Set**

**Titan III-C Urged
For Surveyor Role**

**ESRO II Enters
Critical Testing**

**IMP Model in Goddard's
New Magnetic Facility**

1965_07_05_Missiles_Rockets.jpg



Mariner Mars Replica After Testing at Lewis

**Lunar Rover Programs Advance
Atlas Silos Touted for Titan III.
Laser Communications Test En**

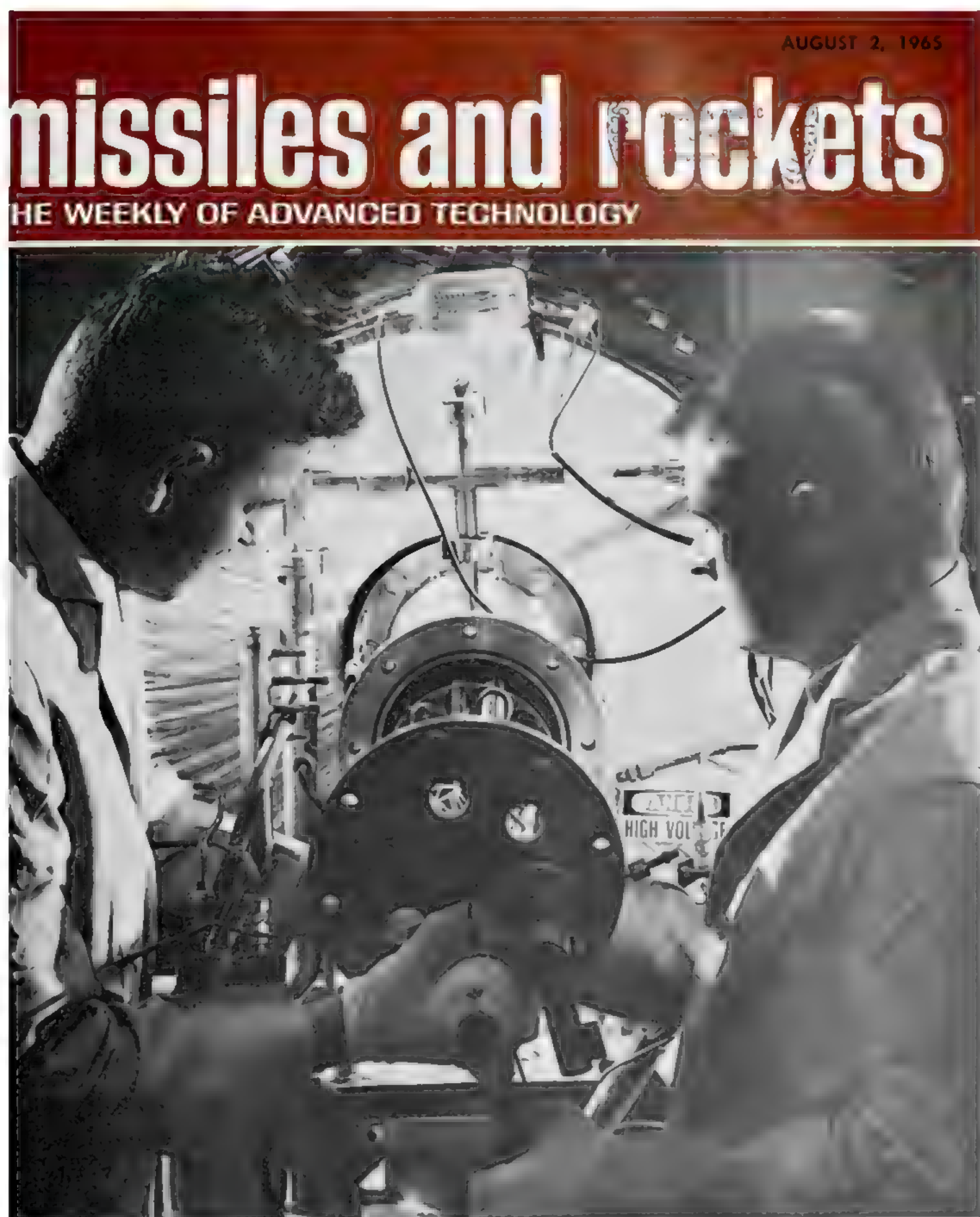
1965_07_12_Missiles_Rockets.jpg



1965_07_19_Missiles_Rockets.jpg



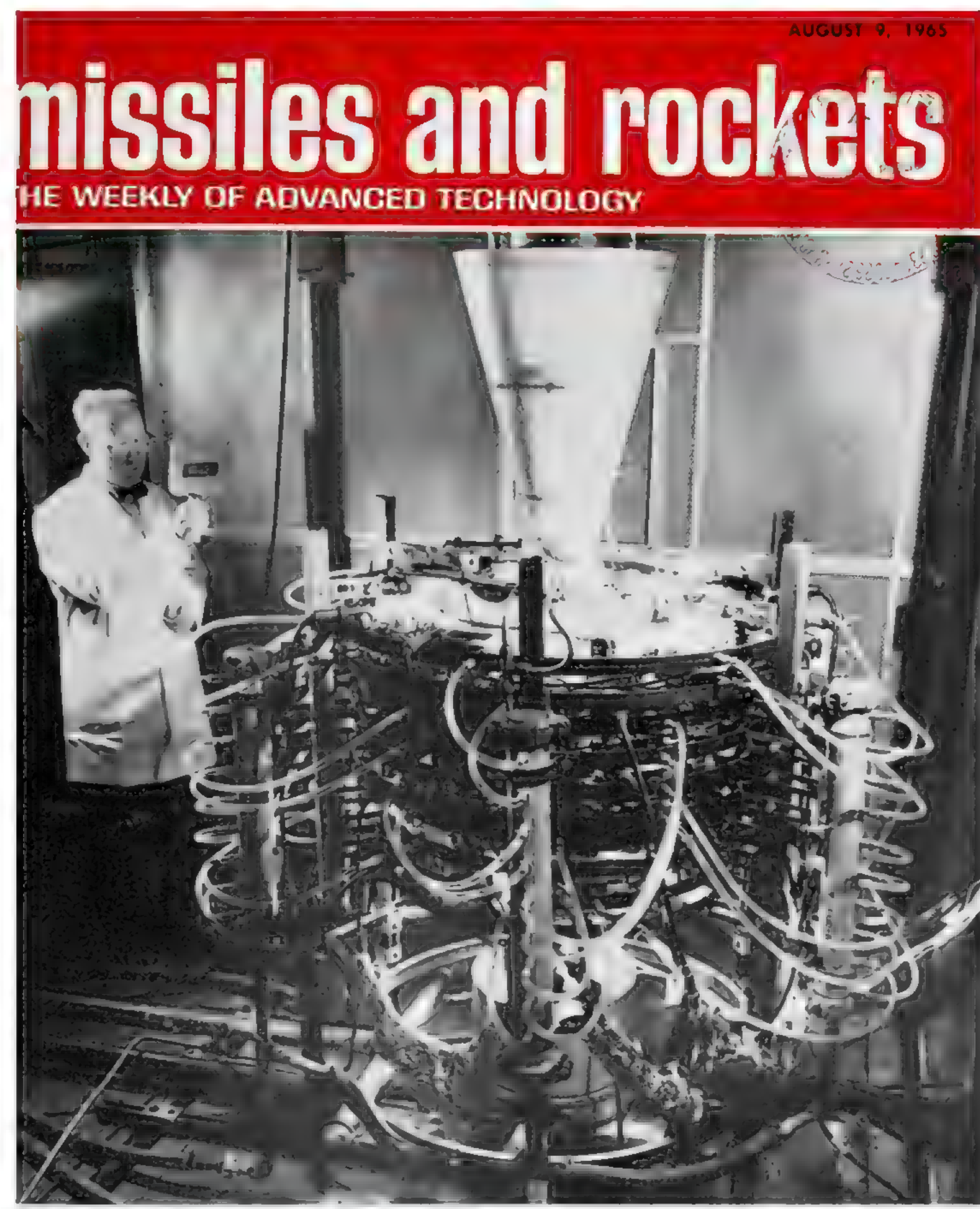
1965_07_26_Missiles_Rockets.jpg



Sperry Rand's Thermally Operated Plasma System (TOPSY)

Report on AIAA San Francisco Meetin
Technical Factors No Bar to Nike-X U
SIGS Hopes May Ride on Shot This W

1965_08_02_Missiles_Rockets.jpg

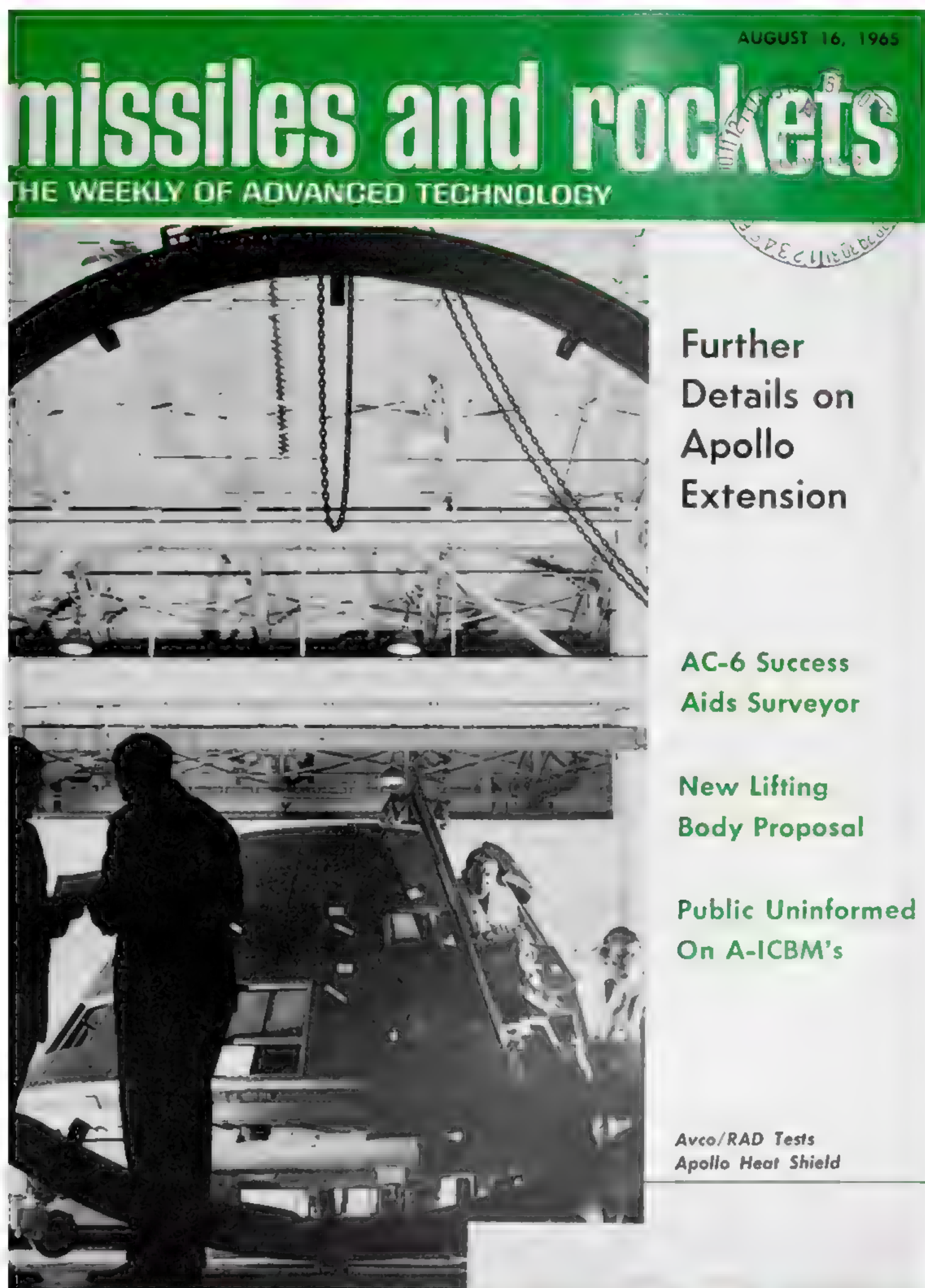


Model in High-Temperature Testing at Boeing

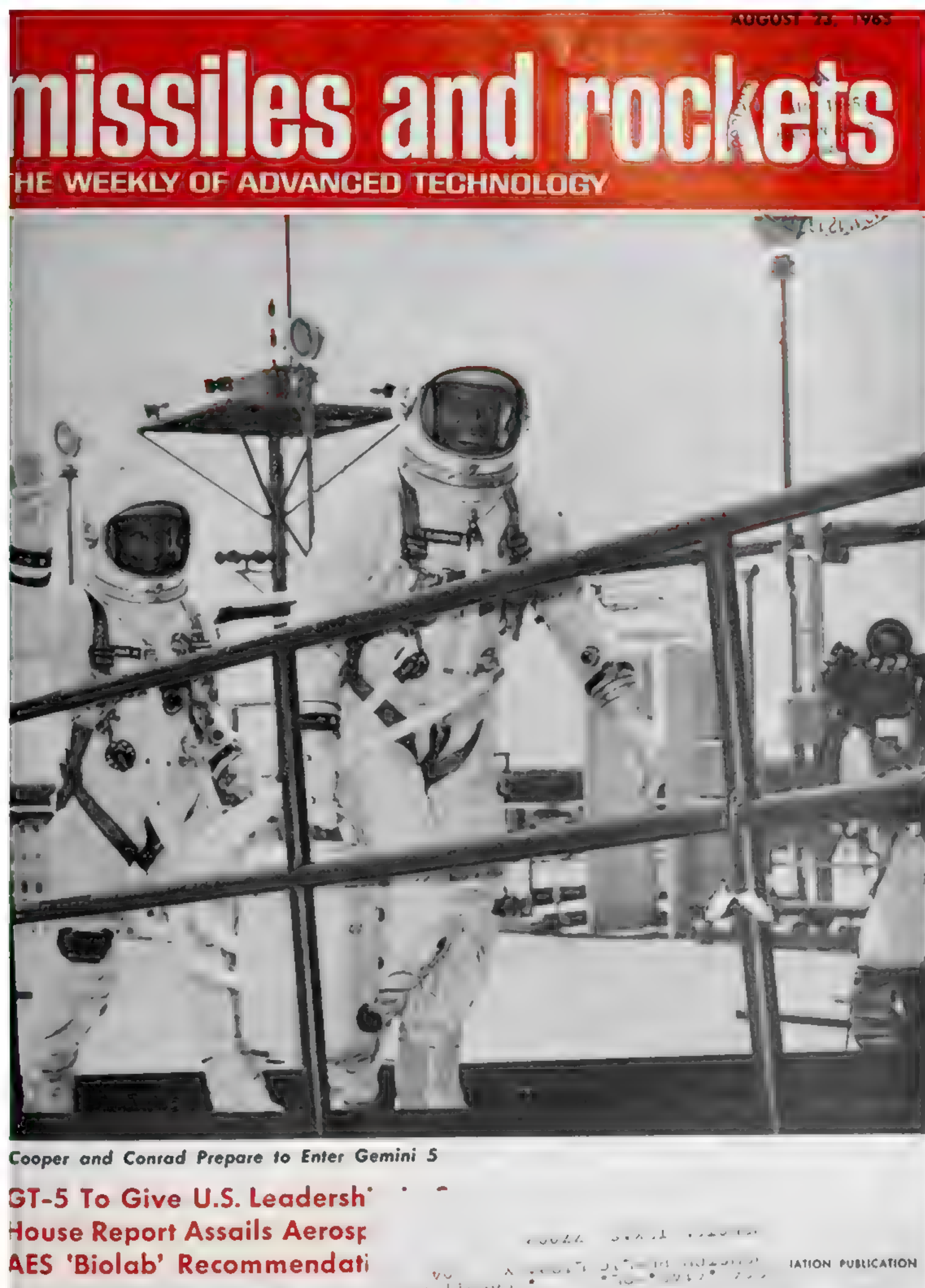
NASA Presses Advanced Apollo Planning . . 14
H₂O₂ Oxidizer Shows Wide Potential 23
Voyager Setting Sterilization Standard 32

AN AMERICAN AVIATION PUBLICATION

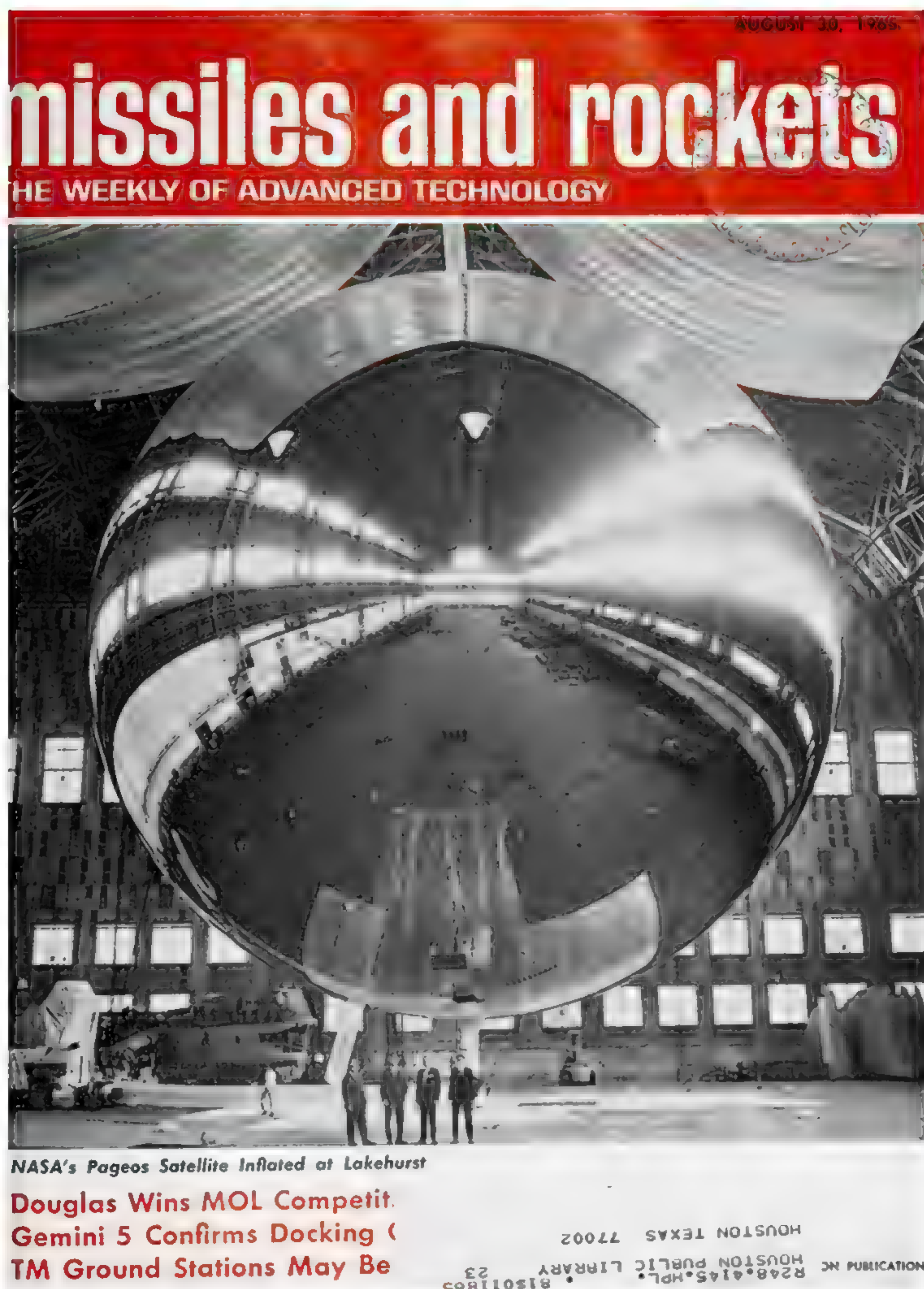
1965_08_09_Missiles_Rockets.jpg



1965_08_16_Missiles_Rockets.jpg



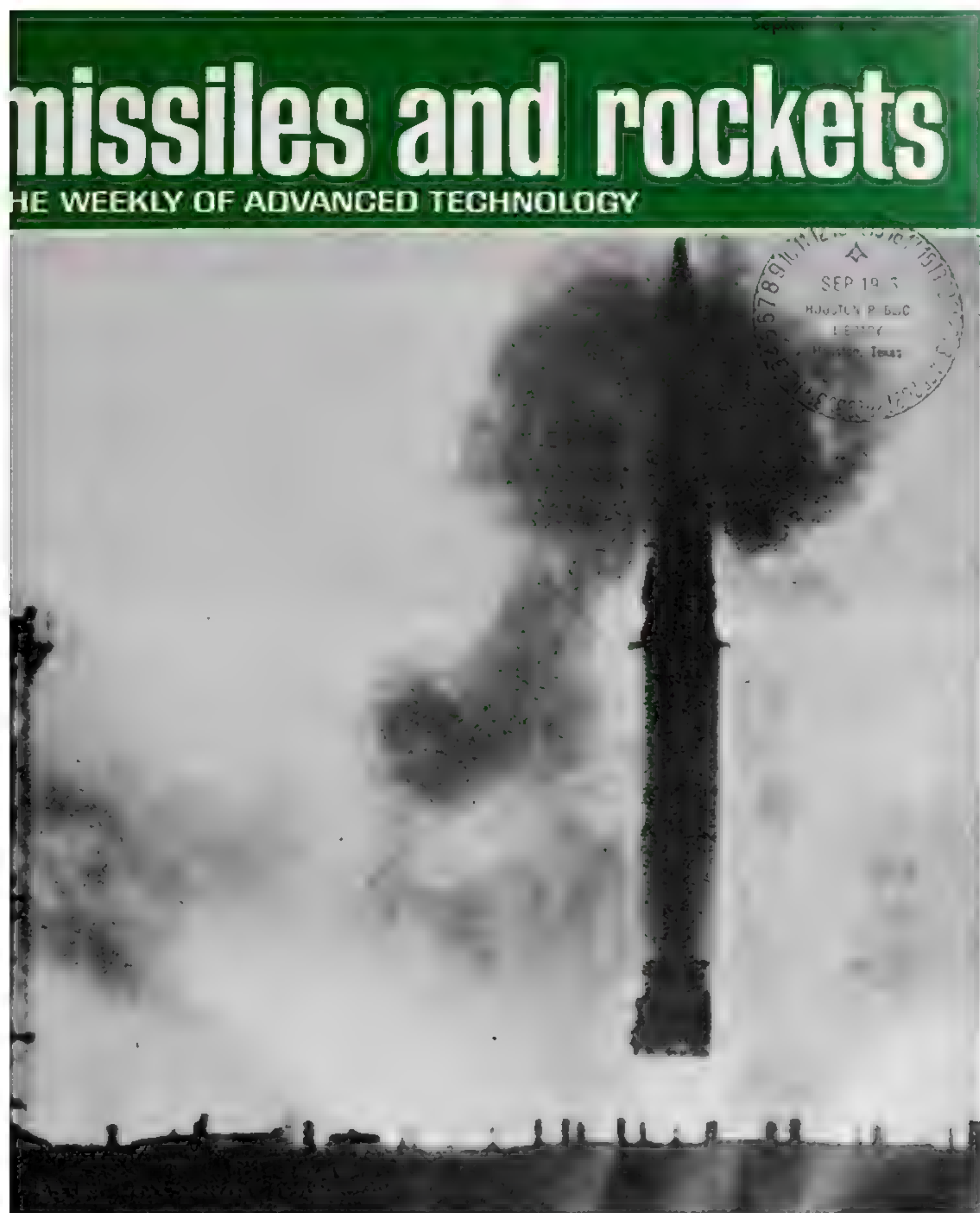
1965_08_23_Missiles_Rockets.jpg



1965_08_30_Missiles_Rockets.jpg

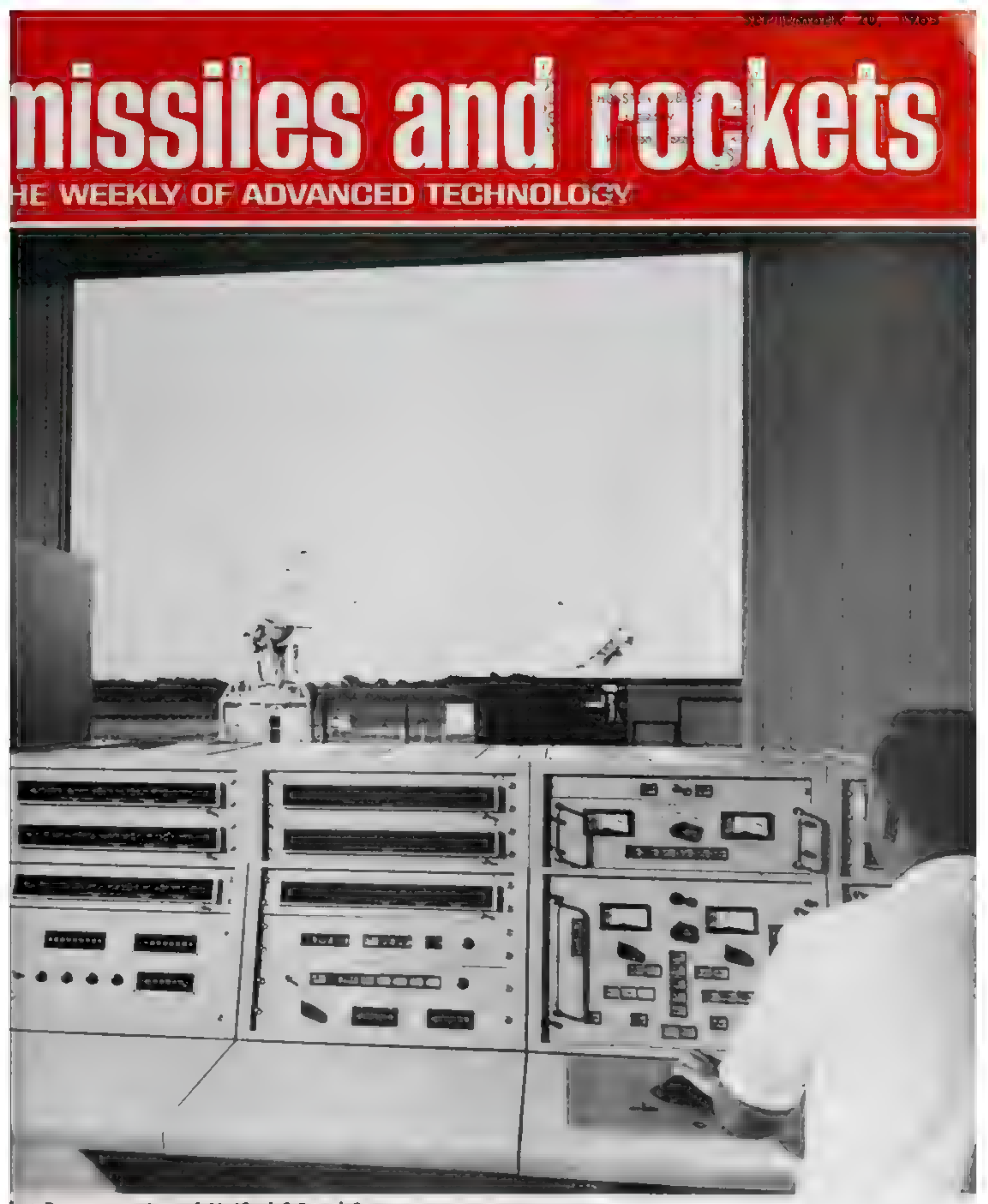


1965_09_06_Missiles_Rockets.jpg



ilo-Launched Soviet ICBM Blasts Off
 DDR&E Shuffle De-Emphasizes
 Scramjet Flight Tests Slated for
 latest Edition of M/R's Astrola

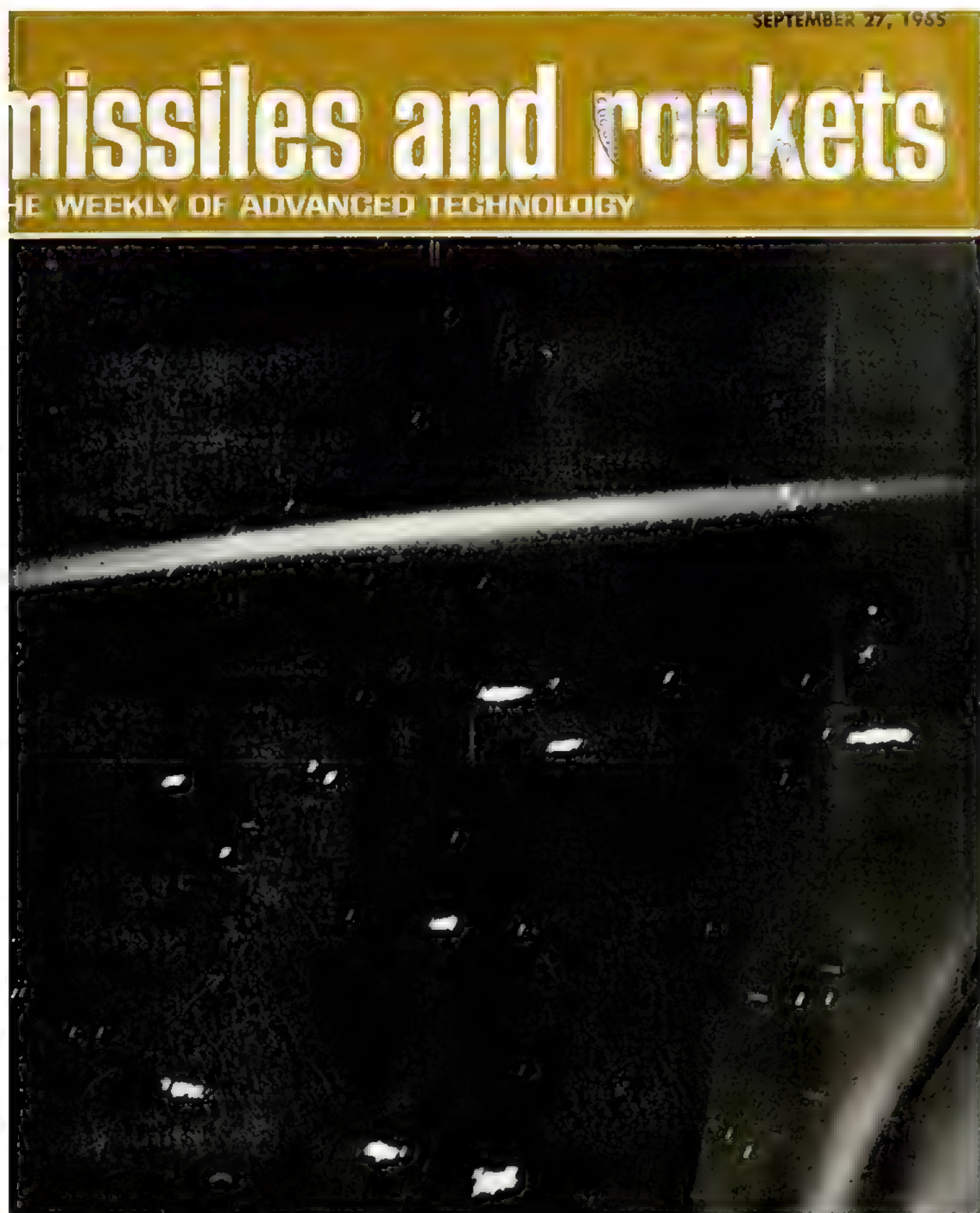
1965_09_13_Missiles_Rockets.jpg



First Demonstration of Unified S-Band System

Marshall To Get AES Integration Task
 Air Force Announces
 NASA Analyzing As

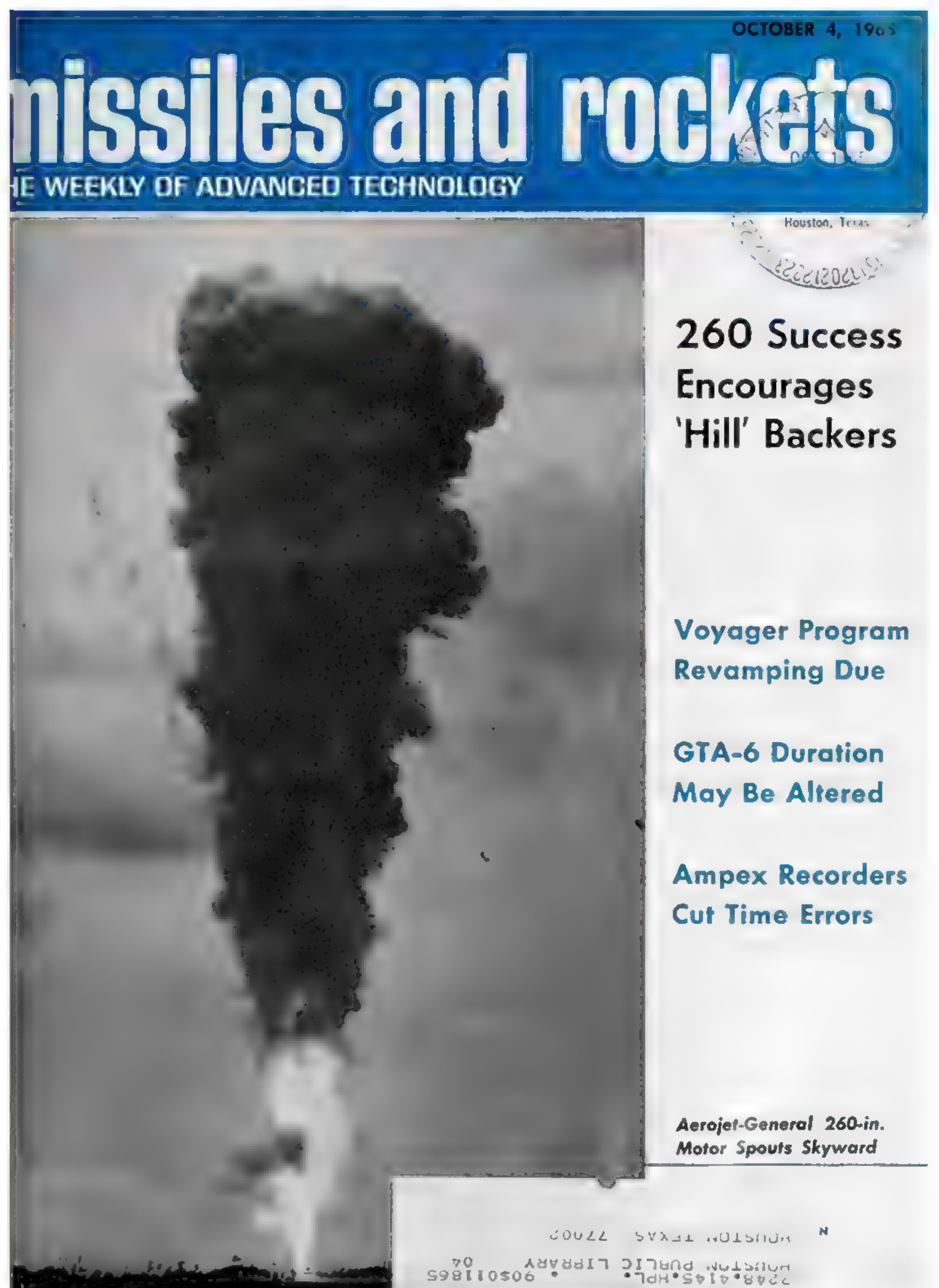
1965_09_20_Missiles_Rockets.jpg



First Useful Photograph of Nightglow Phenomenon

Douglas Reopens Bidding on MOL
 NASA Presses Aerobee 350 Devel
 Demand Grows for 'Vigicon' Displ

1965_09_27_Missiles_Rockets.jpg



260 Success
 Encourages
 'Hill' Backers

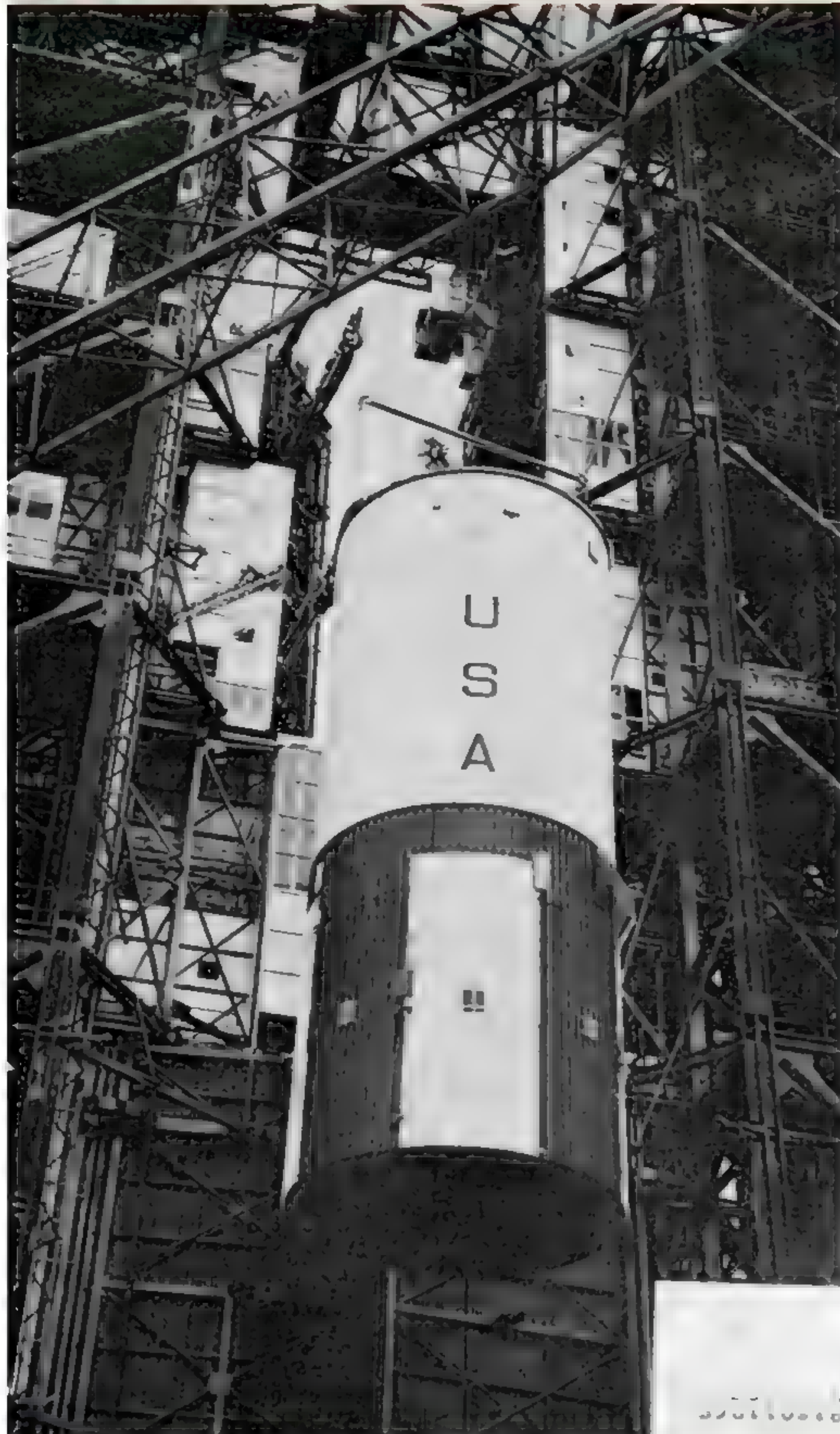
Voyager Program
 Revamping Due

GTA-6 Duration
 May Be Altered

Ampex Recorders
 Cut Time Errors

Aerojet-General 260-in.
 Motor Spouts Skyward

1965_10_04_Missiles_Rockets.jpg



**Hypersonic
Work Adding
to X-15's Life
Expectancy**

**DDR&E Revamp
Nears Completion**

**Air Force Fights
156-in. Demise**

**Big High-Energy
Physics Push Seen**

*Saturn S-IVB Stage
Being Erected at Cape*

1965_10_11_Missiles_Rockets.jpg



**Aerospace
Corp. To Get
Major Role
in MOL-
Schriever**

**More Missile Use
Seen in Viet-Nam**

**Thermionic Space
Power Considered**

**Modified Agena
Set for Rendezvous**

*World's Most Accurate
Telescope in West Virginia*

1965_10_18_Missiles_Rockets.jpg



Second Air Force Titan III-C Rises from Pad
**Navy Studies Modified Walleye
Poseidon Propulsion Awards L
Convair Streamlines for Profits**

1965_10_25_Missiles_Rockets.jpg



**Rendezvous
Flight Off
Until 1966**

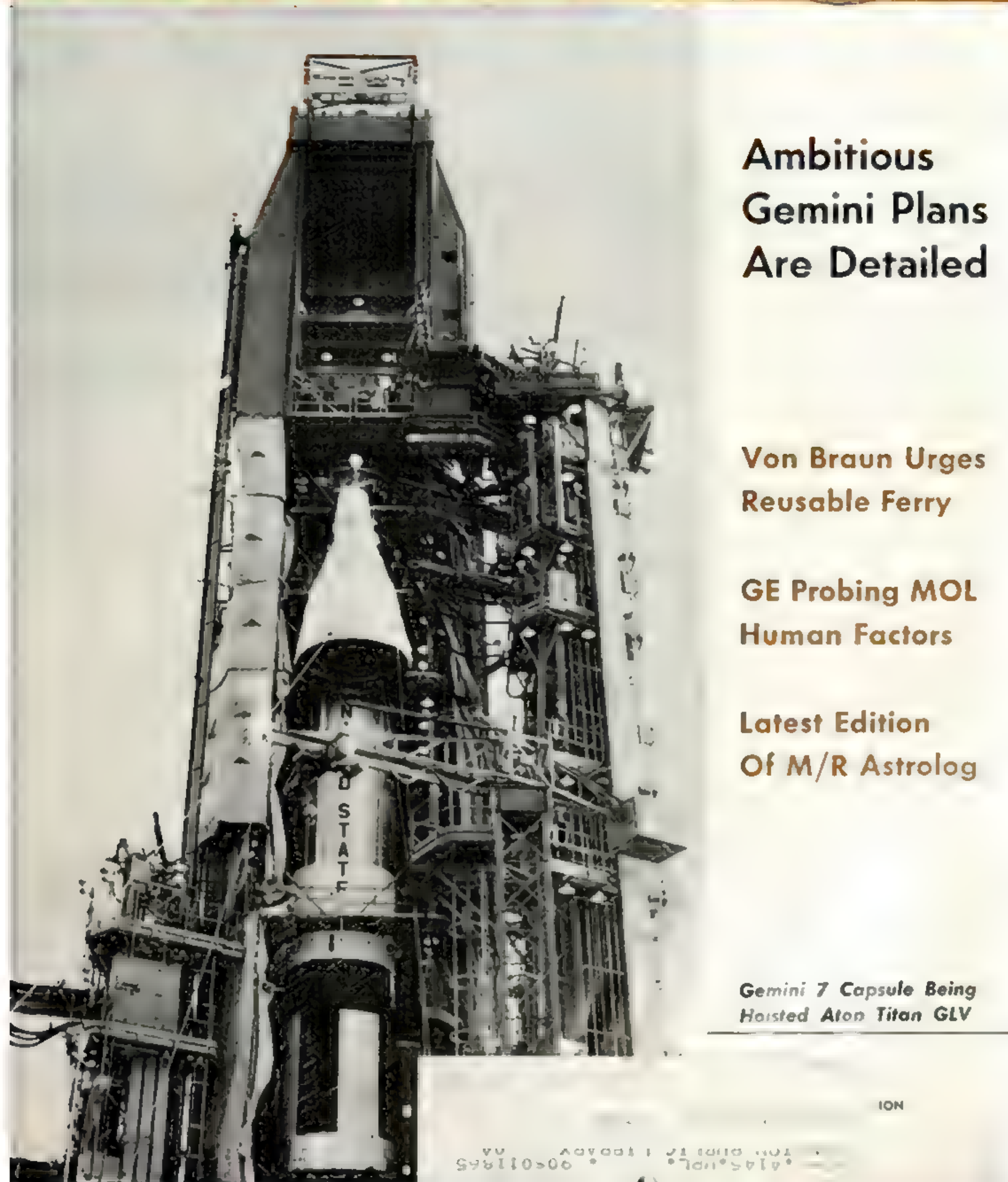
**New Air-Defense
Missiles Pondered**

**Manned Apollo
Speed-up Possible**

**Further Post-'70
Missions Studied**

*Agena Target Heads
for Early Disaster*

1965_11_01_Missiles_Rockets.jpg



**Ambitious
Gemini Plans
Are Detailed**

**Von Braun Urges
Reusable Ferry**

**GE Probing MOL
Human Factors**

**Latest Edition
Of M/R Astrolog**

**Gemini 7 Capsule Being
Hoisted Aboard Titan GLV**

1965_11_08_Missiles_Rockets.jpg



NAA Flexible-Wing Recovery System in Flight

**Orbital Weapons Delivery Questio
Aerospace Stocks Continue Surge
Boron Filament Plant Being Built**

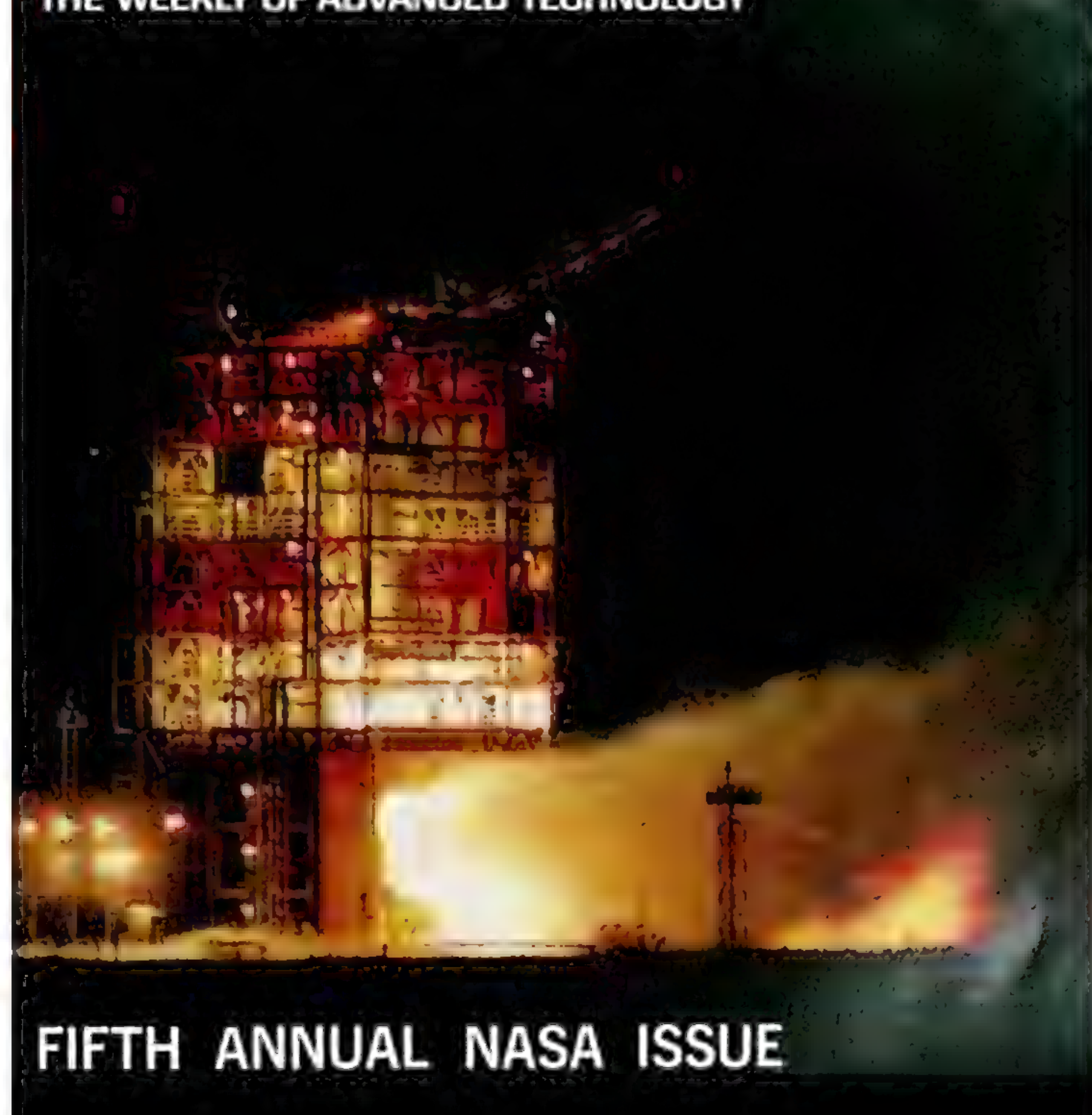
1965_11_15_Missiles_Rockets.jpg



STAFF Flight Lifts Off Aboard Polaris A-1

**Thermionic Power Gains Cited
Soviets Rap DOD Space Effort
Navy 'Resurrects' Old Rocket**

1965_11_22_Missiles_Rockets.jpg



FIFTH ANNUAL NASA ISSUE

1965_11_29_Missiles_Rockets.jpg



AF Seeking Go-ahead for 'Maverick' Missiles

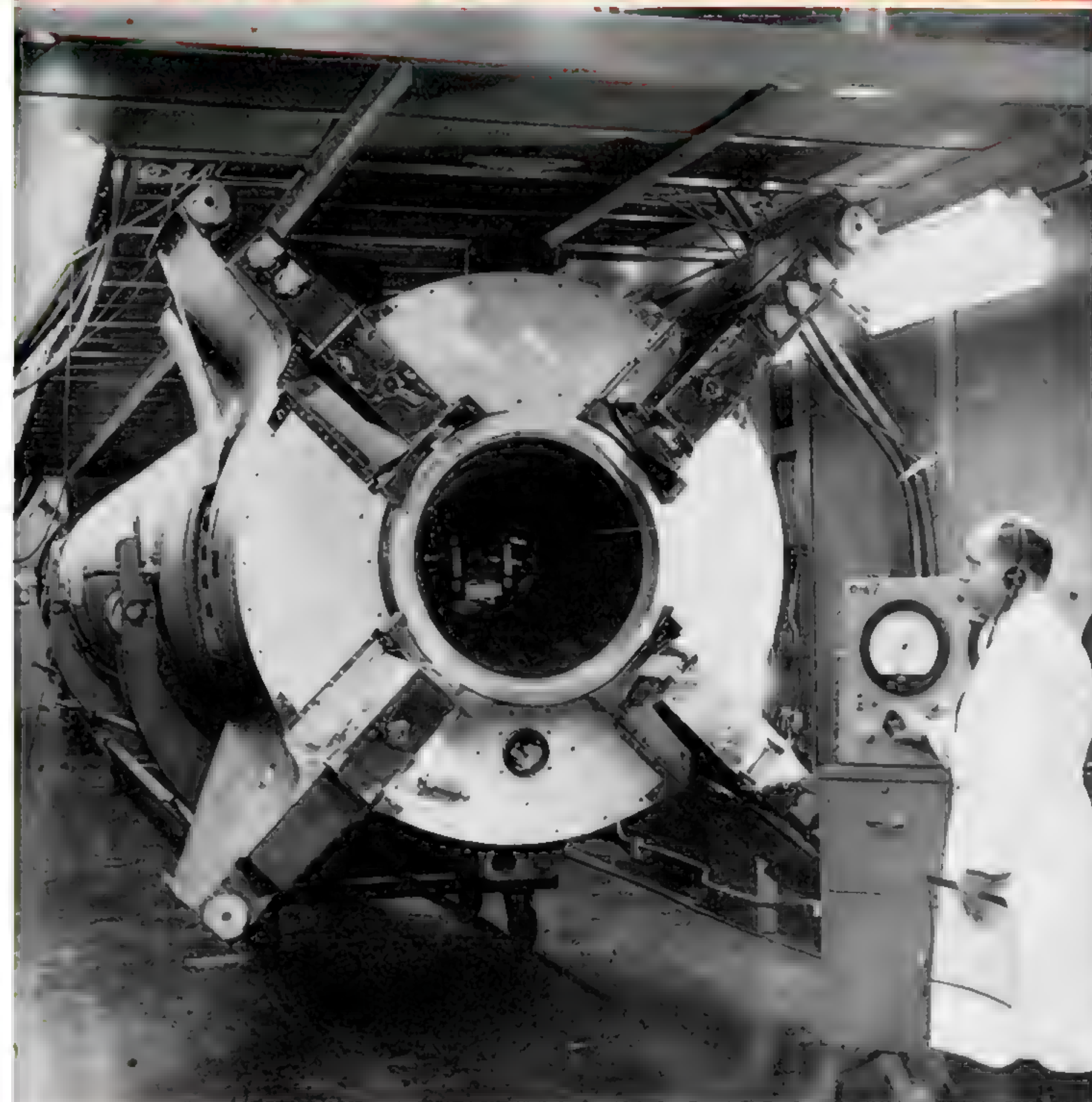
Gemini 8 Awaits
Agena Testing

OV's Delivered
For Dual Launch

Apollo PCM Units
Flight-Qualified

TRW's New Pioneer
Nears Launch Date

1965_12_06_Missiles_Rockets.jpg



Redstone Target Vehicle Gets Pressure Check

NASA Ponders Gemini 8 Speedup
Redstones Used as Missile Targets
Multipurpose Manned Vehicle Urged

1965_12_13_Missiles_Rockets.jpg



Schirra Jubilant after Recovery

Implications of Gemini 7/6 Success
TRW Wins Comsat Corp. Competition
Data Indicates Loose Lunar Surface

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1965_12_20_Missiles_Rockets.jpg



missiles and rockets

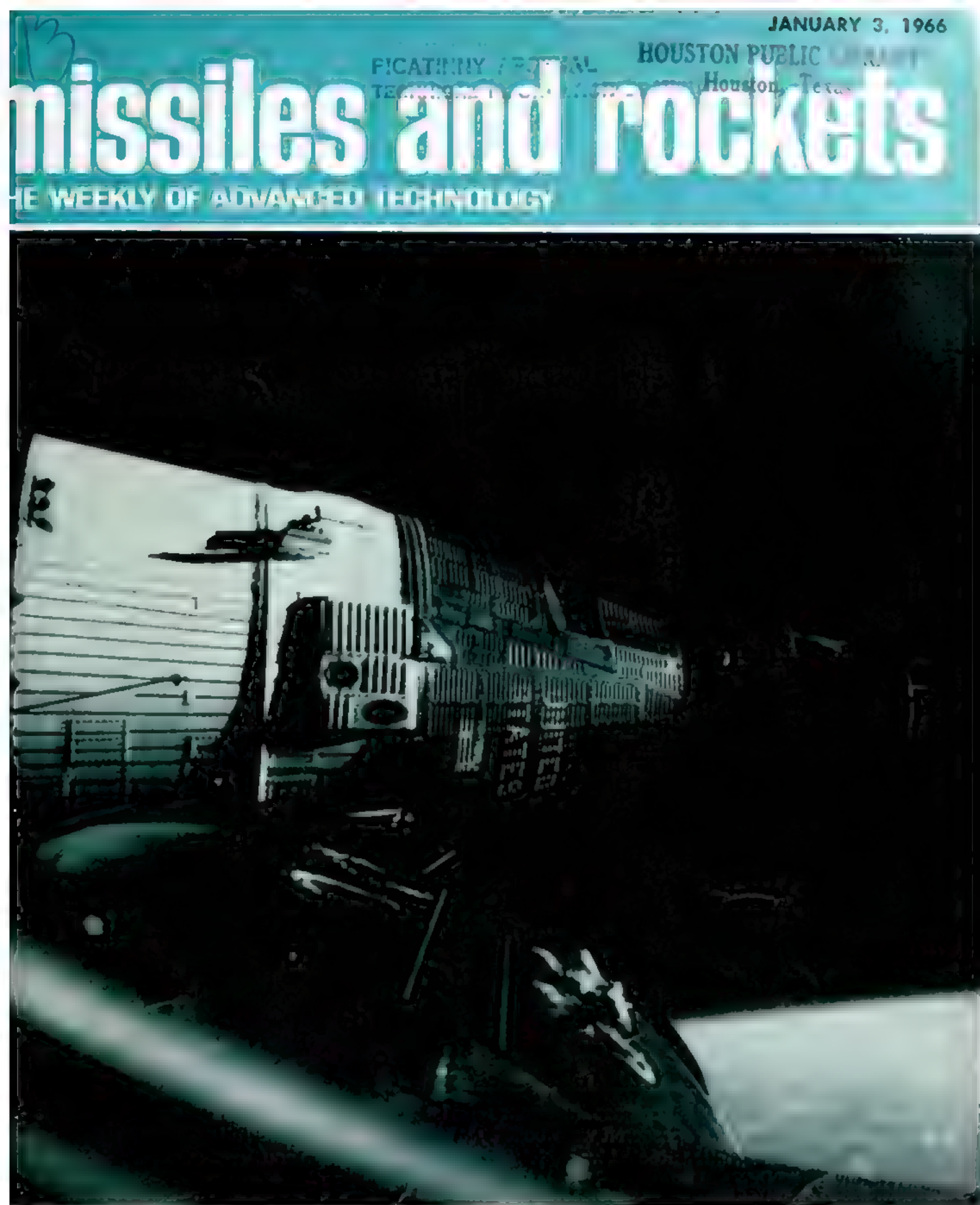
MAGAZINE OF WORLD ASTRONAUTICS



Missiles and Rockets - Magazine of World Astronautics
Published by American Publications, Inc.
Washington D.C.

1966

Volume 18, No. 1-23 (January 3, 1966 to June 6, 1966)



Gemini 7 Viewed from Maneuvering Gemini 6

SPECIAL REPORT—

Gemini 7/6 Mission Opens New Era
Army Wins Approval for SAM-D

AN AMERICAN AVIATION PUBLICATION

1966_01_03_Missiles_Rockets.jpg



DOD Funding
Soars While
NASA Holds
Steady

Starless 'Days'
Poser for Apollo

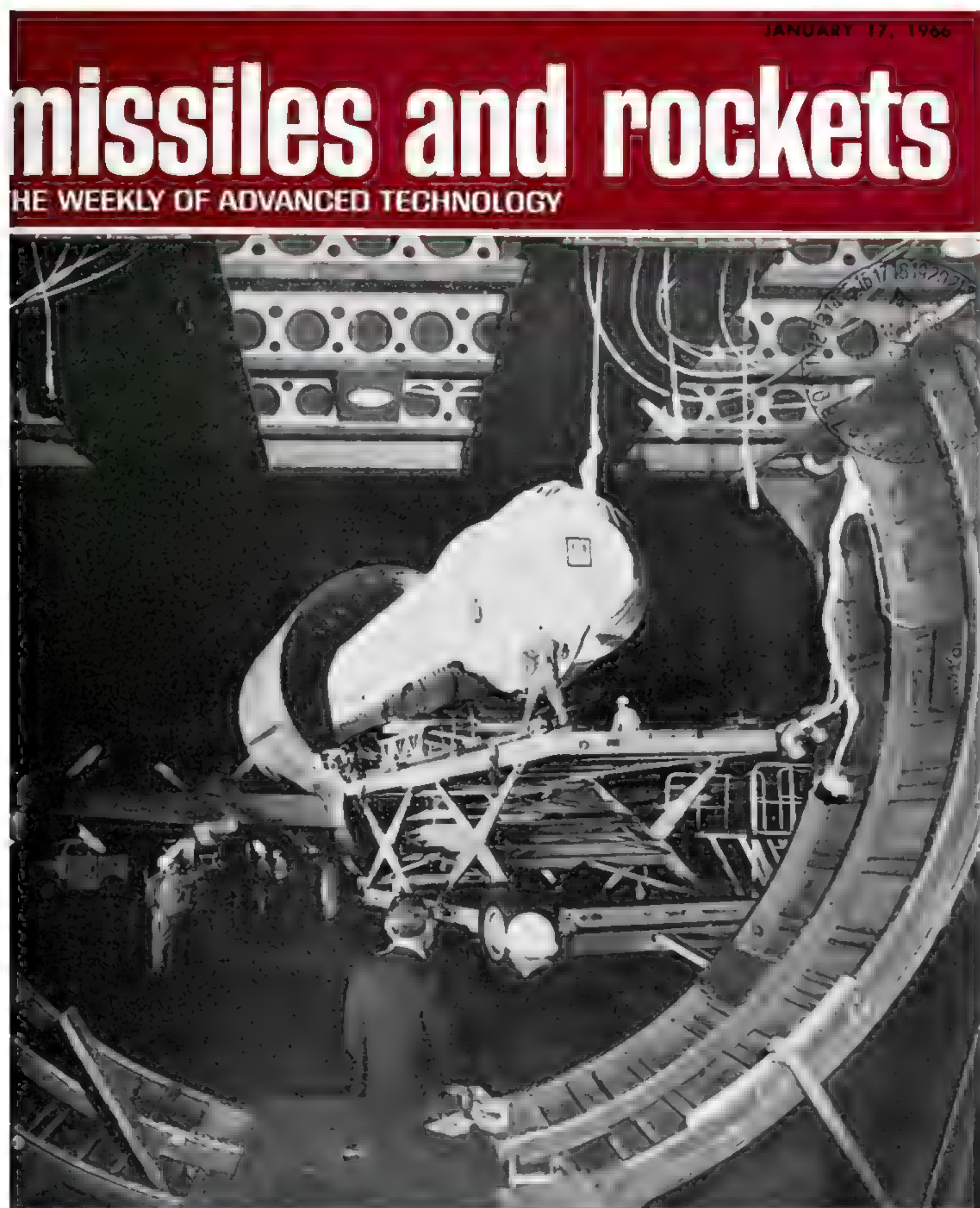
Vandenberg AFB
Gears for MOL

Latest Edition
Of M/R Astrolog

Apollo Prepared for Early
Flight on Saturn IB

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1966_01_10_Missiles_Rockets.jpg

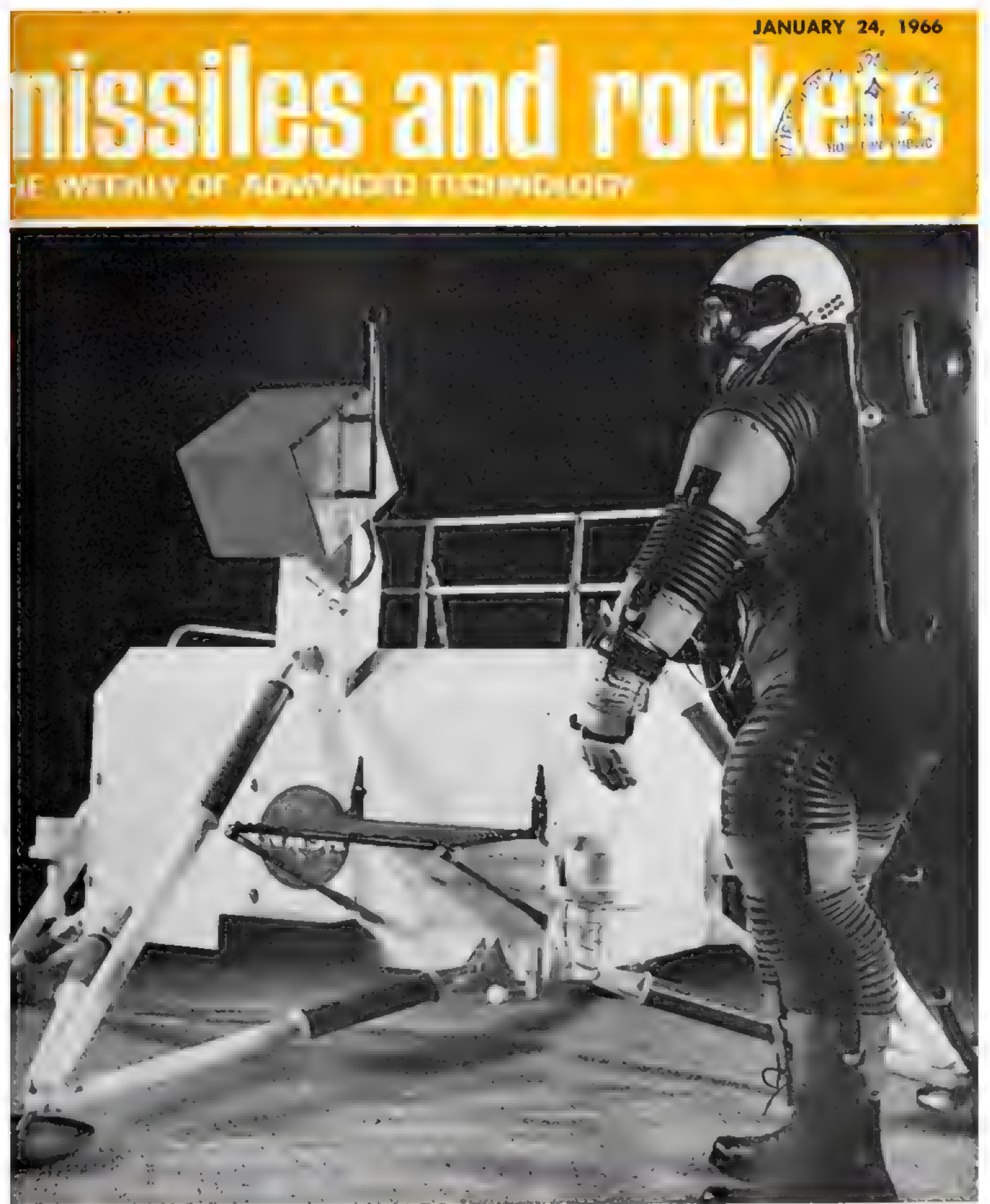


Gemini 8 Booster Unloaded from Pregnant Guppy at Cape

RFP for Apollo Applications Imminent
Dept. of Commerce Sets Up Ocean
COAR To Use Own Launchers for O

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1966_01_17_Missiles_Rockets.jpg

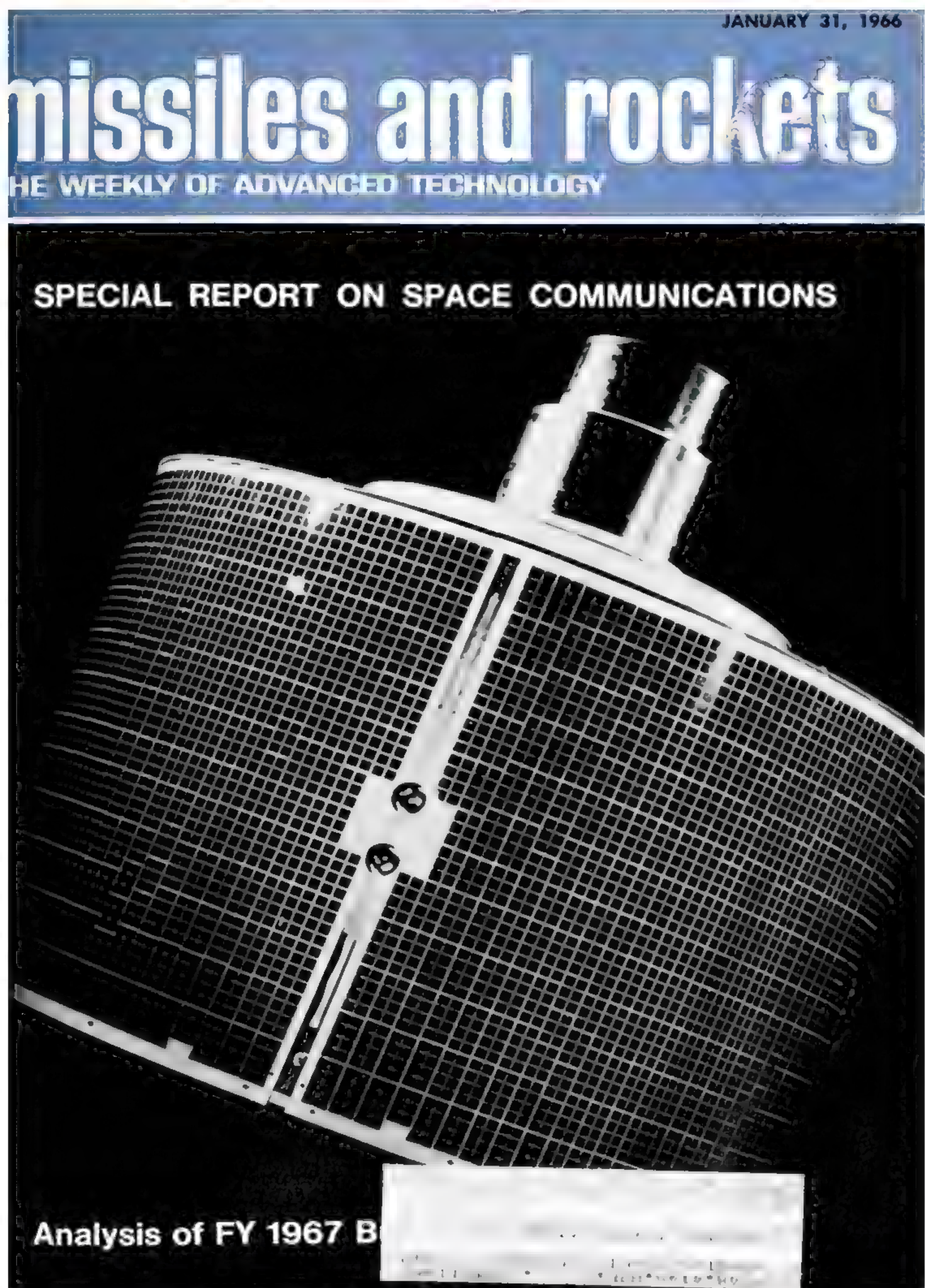


Mockup of Proposed Lunar Flying Vehicle

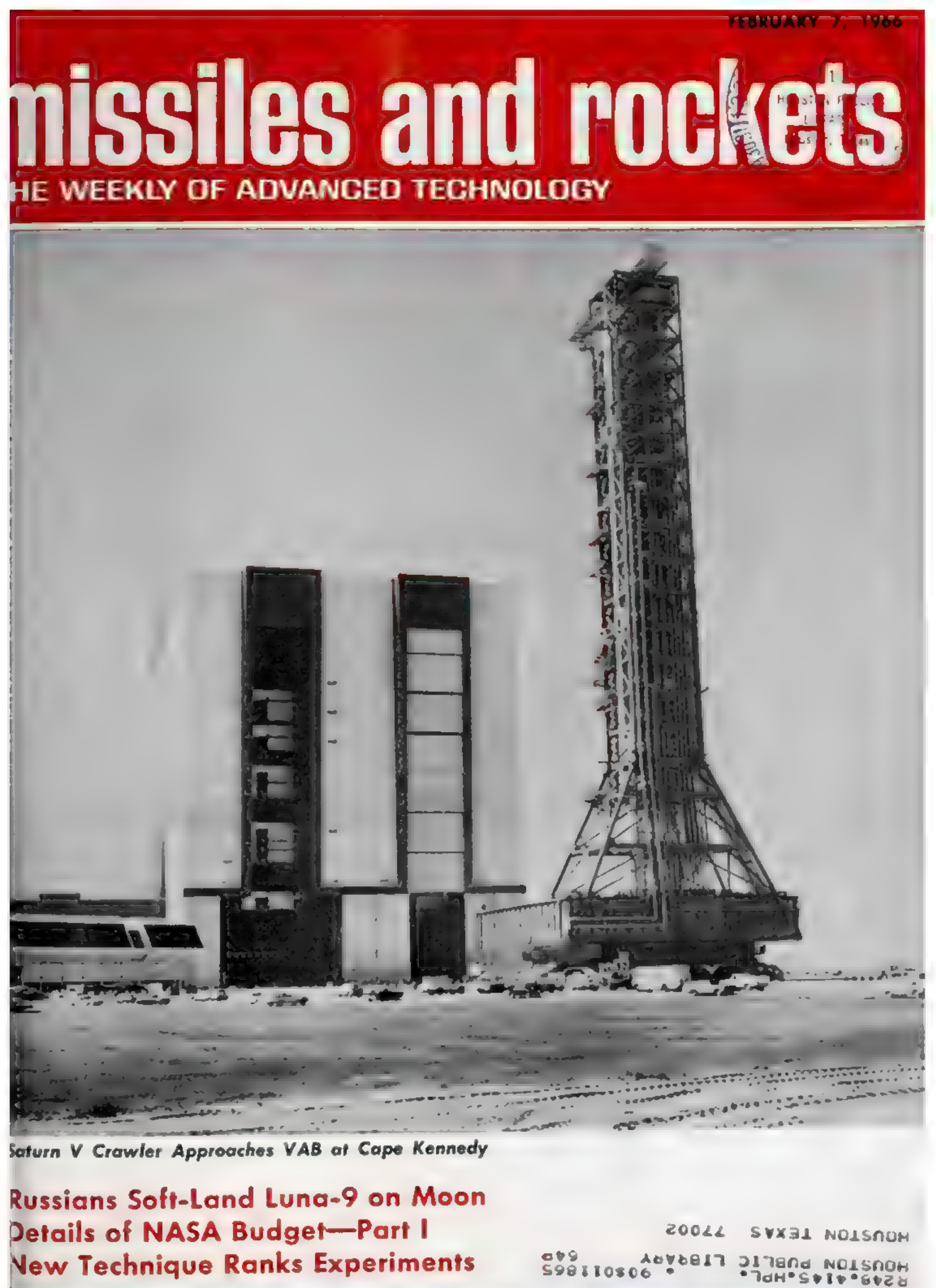
Bullpup, Slingshot, Hawk II
B-1B Bomber
Apollo Tracking Fleet Takes

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AN AMERICAN AVIATION PUBLICATION

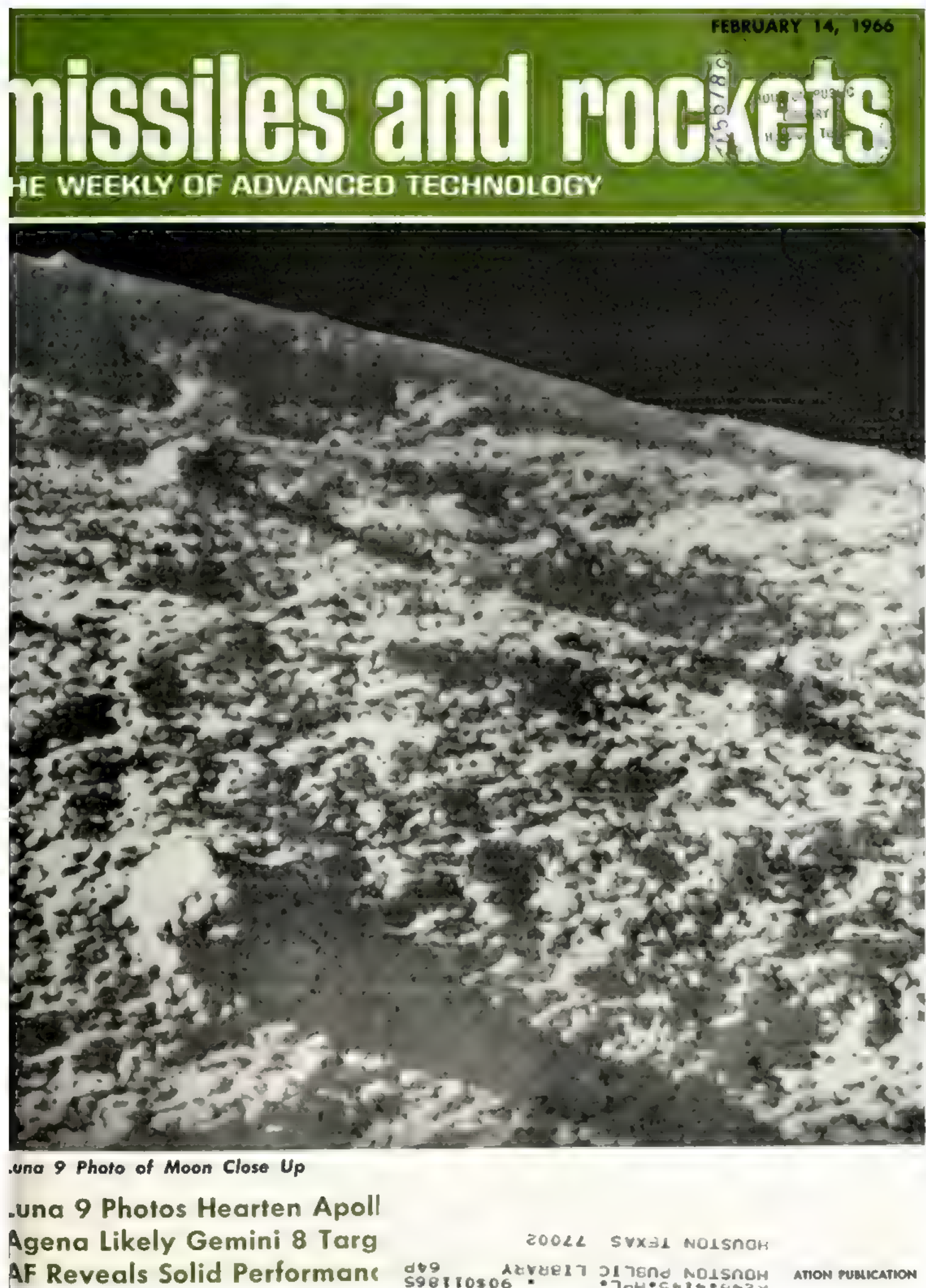
1966_01_24_Missiles_Rockets.jpg



1966_01_31_Missiles_Rockets.jpg



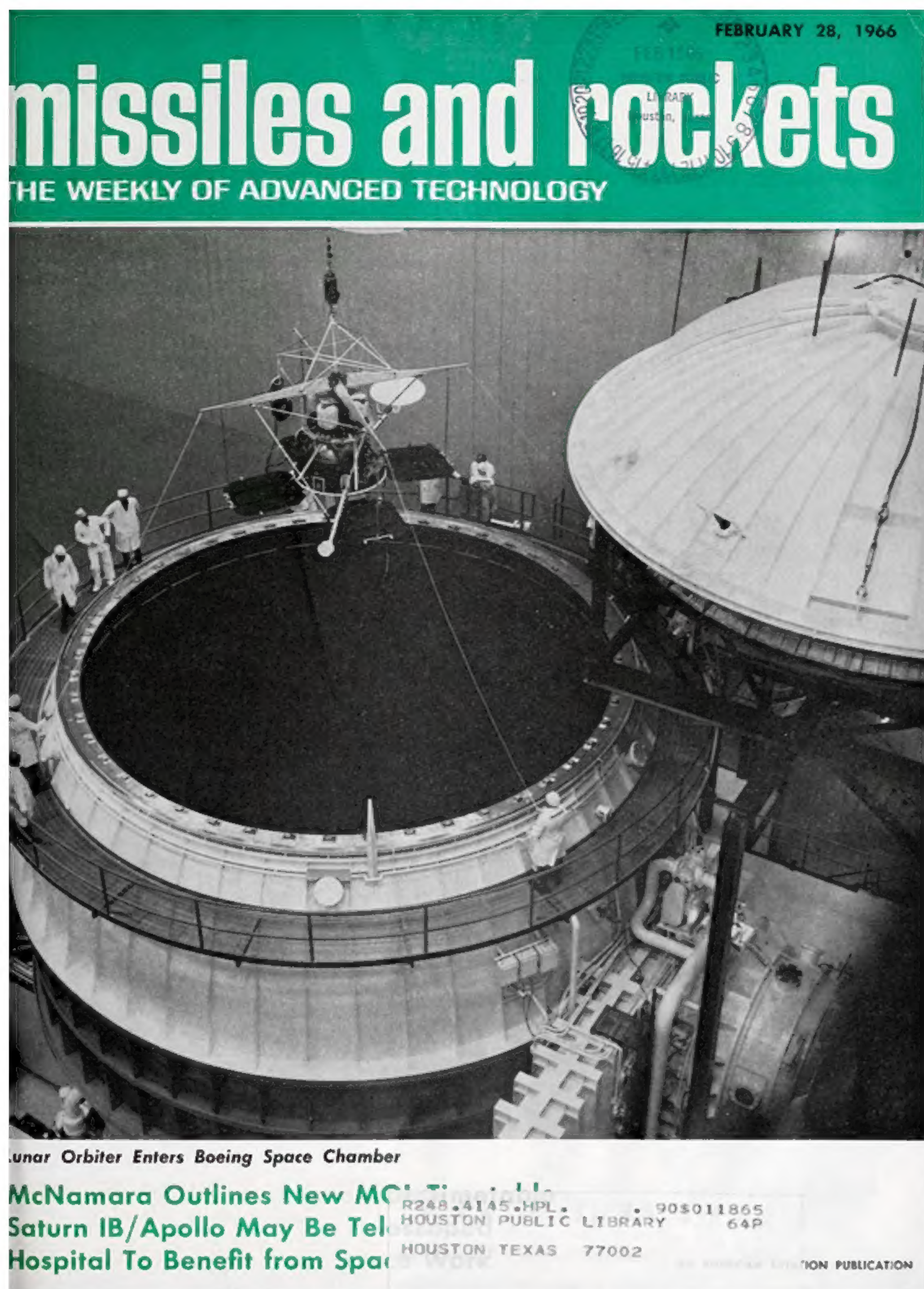
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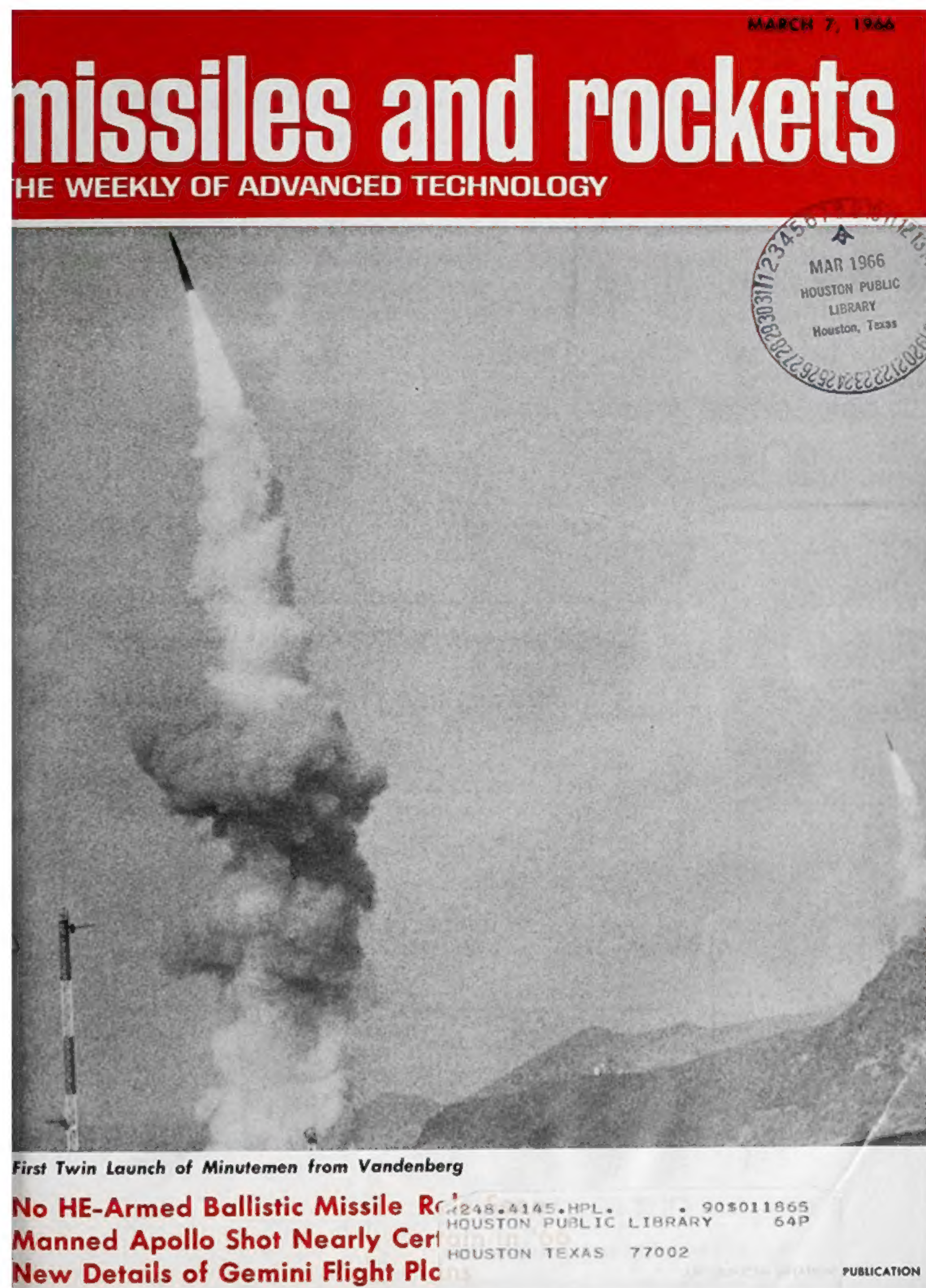
1966_02_14_Missiles_Rockets.jpg



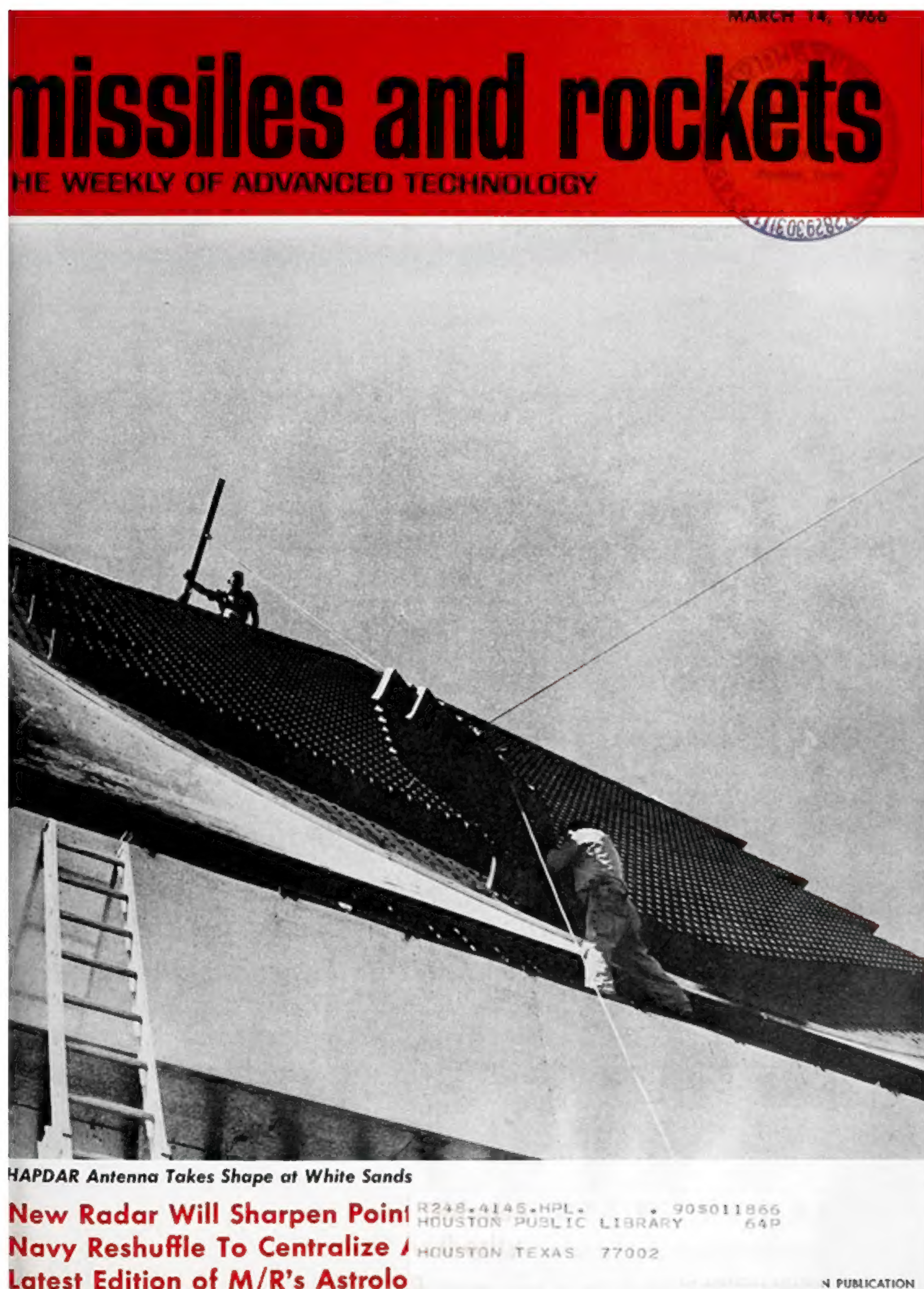
1966_02_21_Missiles_Rockets.jpg



1966_02_28_Missiles_Rockets.jpg



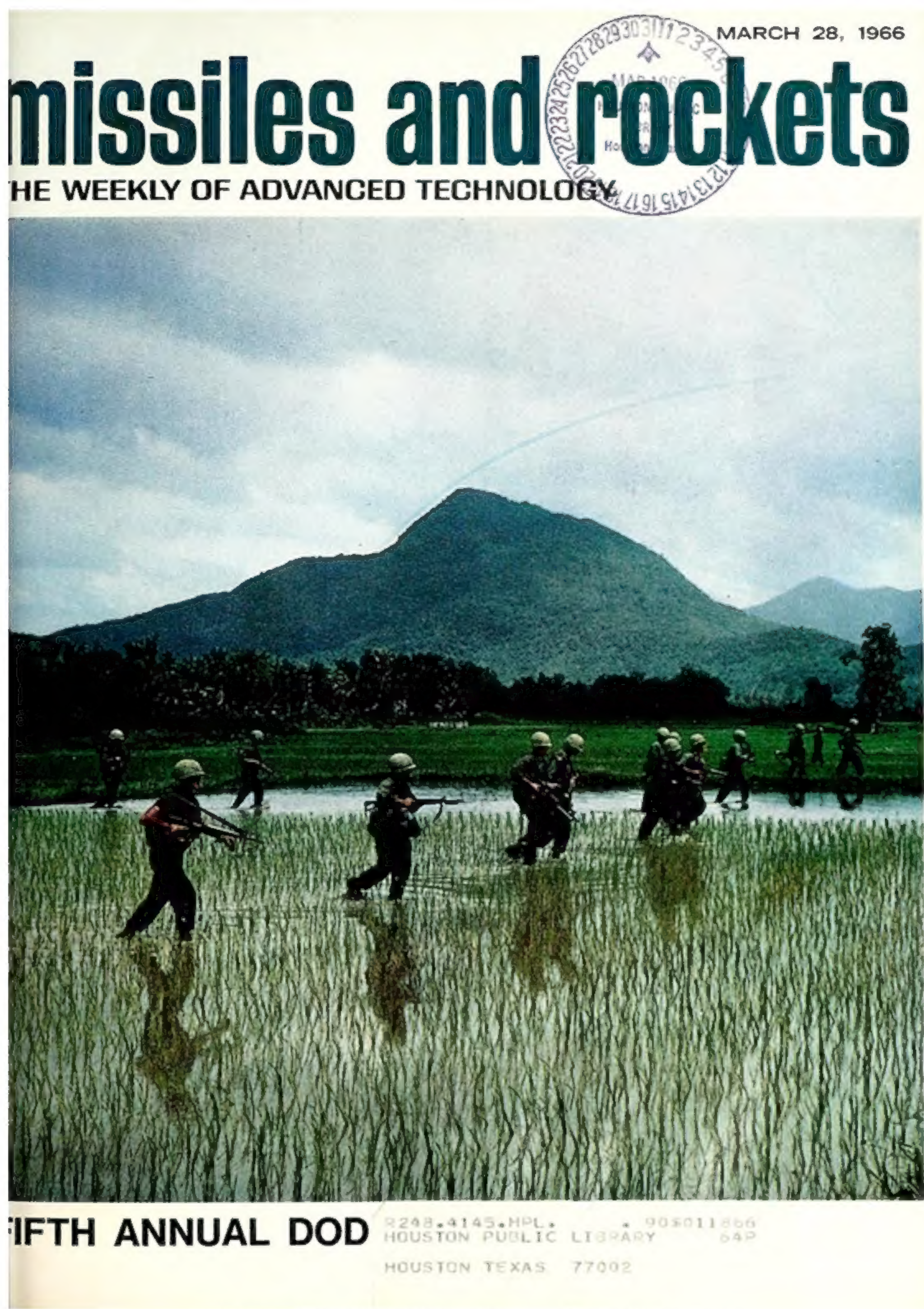
1966_03_07_Missiles_Rockets.jpg



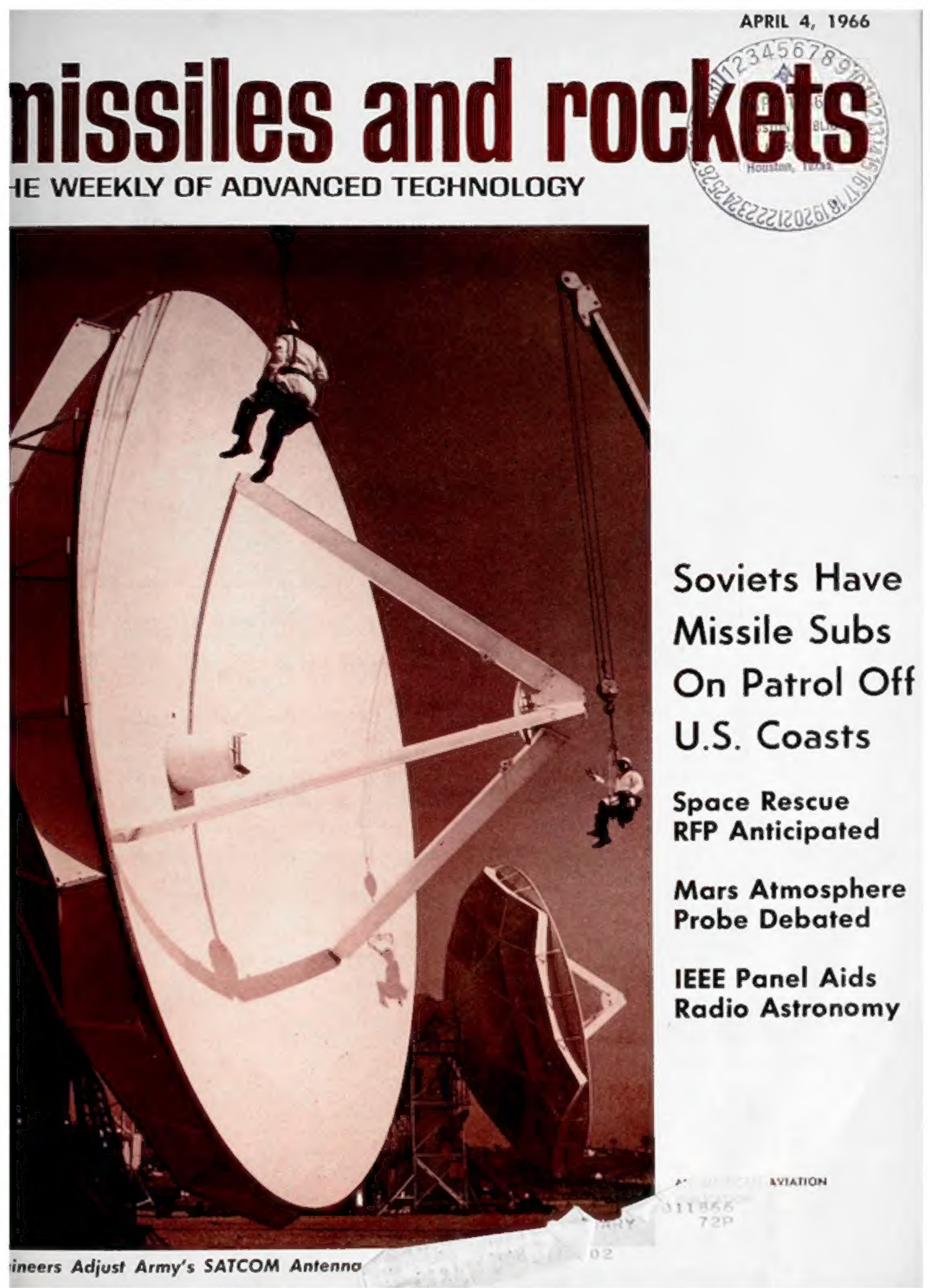
1966_03_14_Missiles_Rockets.jpg



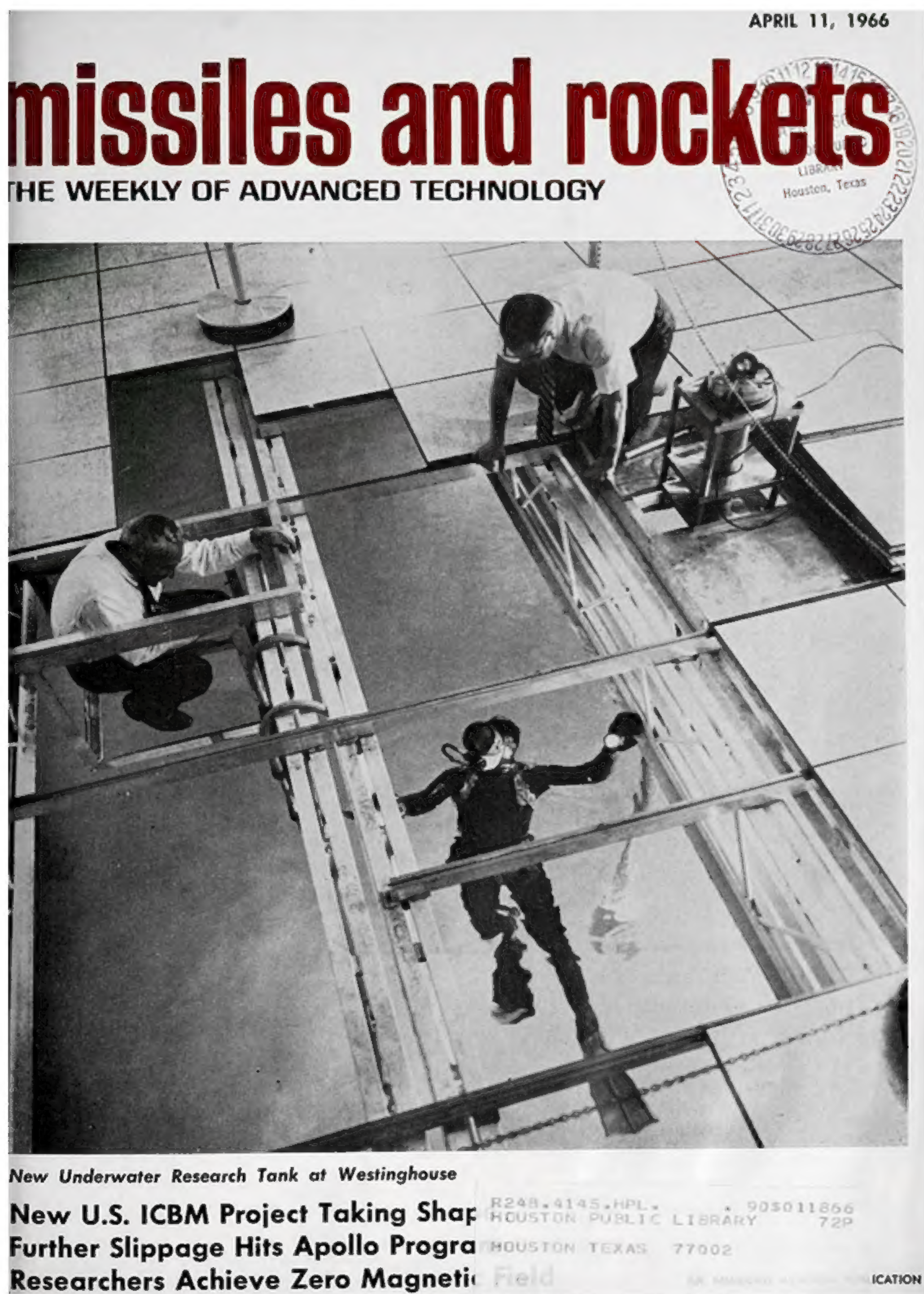
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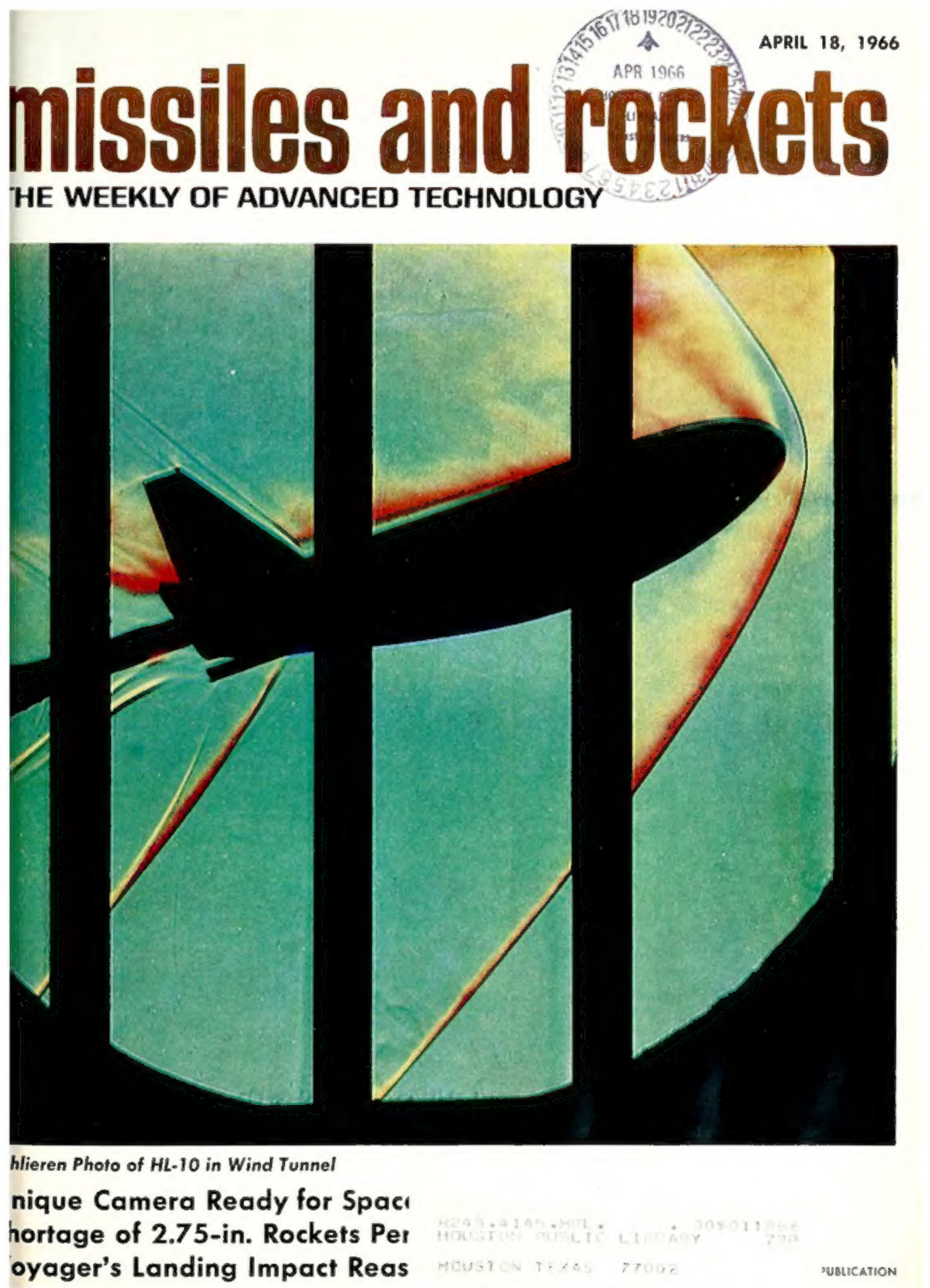
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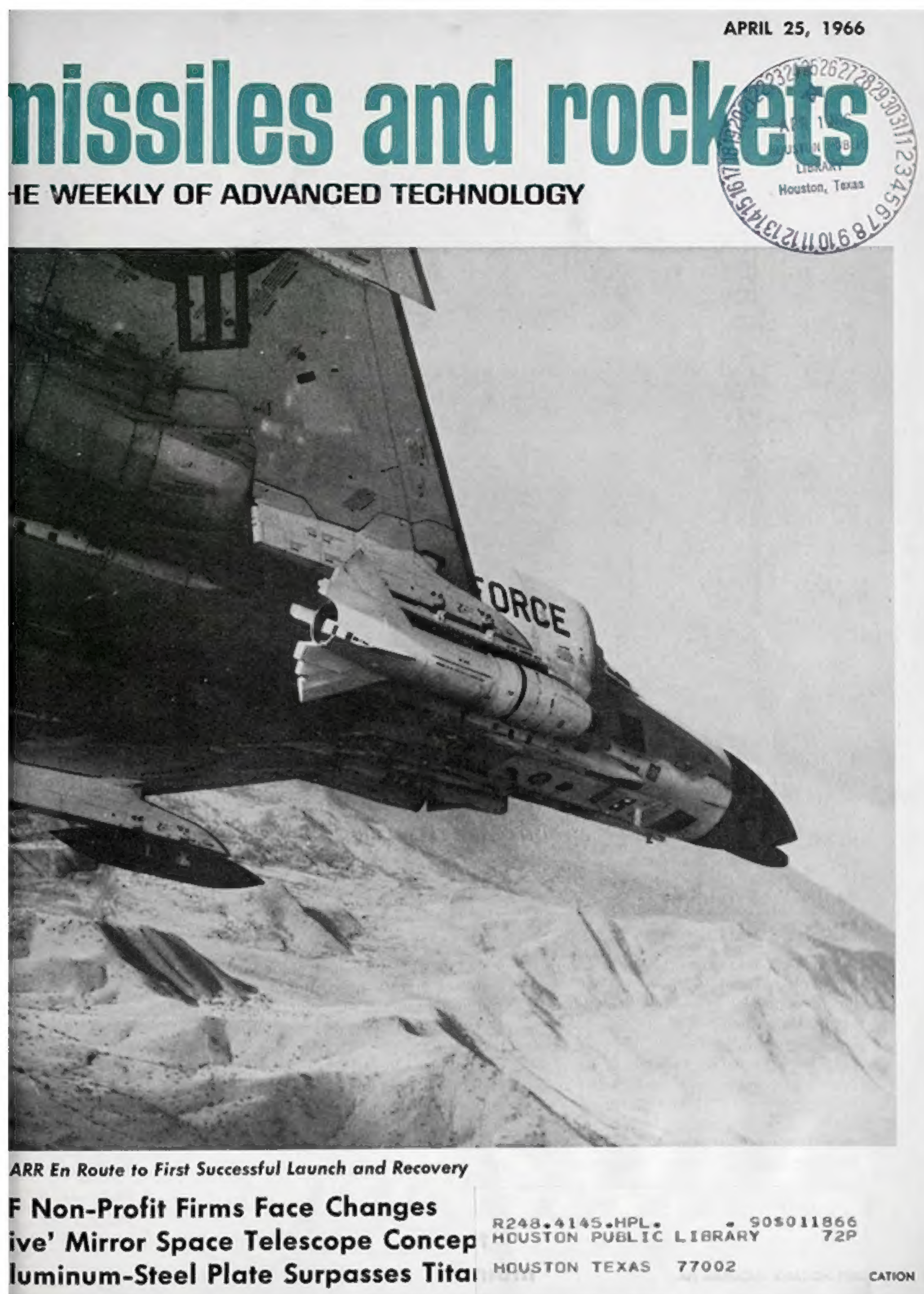
1966_04_04_Missiles_Rockets.jpg

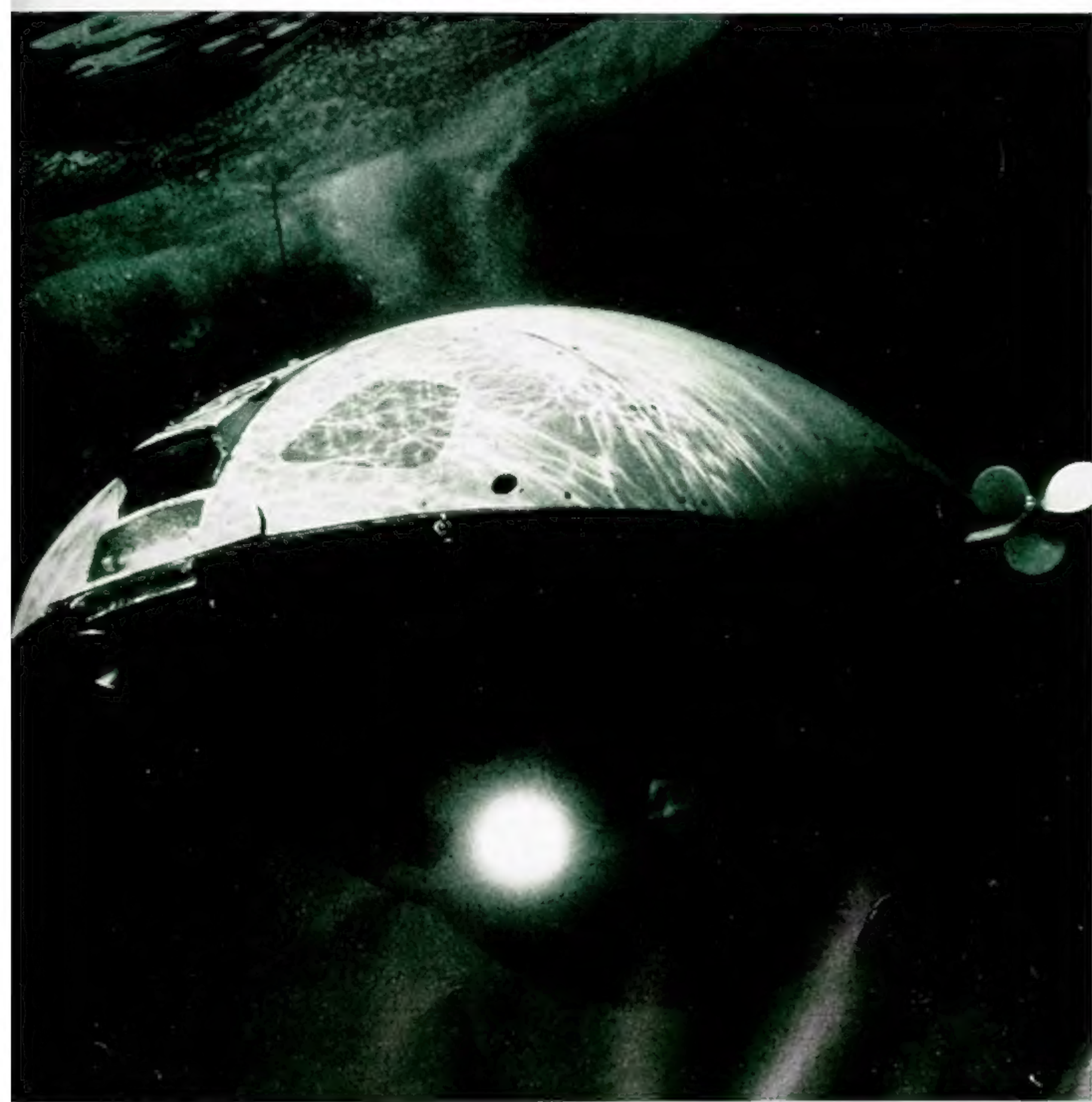


1966_04_11_Missiles_Rockets.jpg



1966_04_18_Missiles_Rockets.jpg





Upstar Diving to Below 4,000 Feet

OSPAR Gets New Soviet Moon Data

Mini Schedule Intact Despite

IC Expanding Non-Profit Mission Publication

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San III Tests ITL Facility at Cape

ike-X Radar Bids Due Soon

N M/R SPECIAL REPORT —

The Military in Space

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anechoic Chamber at IBM Electronics Systems Center

Europa I Flight Boosts ELDO Hopes

Surveyor Initiates New JPL Philosophy

Single Laser Safety Authority Urge

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